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M E N T O N E

MENTONE,
THE RIVIERA, CORSICA
AND
BIARRITZ
AS WINTER CLIMATES.

BY

J. HENRY BENNET, M.D.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON,
PHYSICIAN-ACCOCHEUR TO THE ROYAL FREE HOSPITAL,
DOCTOR OF MEDICINE OF THE UNIVERSITY OF PARIS,
FORMERLY RESIDENT-PHYSICIAN TO THE PARIS HOSPITALS (EX-INTERNE DES
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P R E F A C E.

THE following pages embody the experience of three consecutive winters passed at Mentone on health grounds—from 1859-60 to 1861-62.

The harassing labours and cares of a London professional life broke down vital powers, and obliged me to seek abroad rest and a genial winter climate. The reminiscences of former travel led me to the Riviera, and the ties of friendship to Mentone, then an Italian city. I soon became convinced that the choice was a fortunate one, and remained there throughout the winter.

The second winter I wished to find a locality even more favoured, and sought for it in Italy. The search, however, was vain; and after suffering severely from the unhygienic state of the large towns of that classical land, I turned back, and again took refuge at Mentone. The second trial

having proved even more satisfactory than the first, I determined to wander no more, and to adopt Mentone as a permanent winter residence.

In the present edition I have endeavoured to render the description of this district more perfect. Mentone has become Menton, a French town, but I have retained the Italian denomination, because it was the one by which I first knew this smiling spot, and because I prefer the word. I have also added an account of Corsica and of Biarritz, which may be useful to some of those who are in search of a winter climate.

October, 1862.

60, GROSVENOR STREET, }
THE FERNS, WEYBRIDGE, } May to October.

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MENTONE AND THE RIVIERA.

CHAPTER I.

INTRODUCTORY REMARKS.

THERE are few Italian travellers to whose mind the word "Riviera" does not recall the recollection of happy days of leisurely vetturino progress, along a sunny, picturesque coast, overshadowed by bold mountains, and inhabited by fishermen, who, on a fine autumnal evening, often seem to realize the scene of the market chorus in "Masaniello." To me, when overtaken by ill health, and obliged to abandon, for a time at least, the hard work of active life, it was quite a consolation to feel that I could migrate to this sunny coast, and conscientiously spend a few months in legitimate idleness, in a spot which memory painted in such glowing colours. In this instance, also, the memories of the past were fully verified by the realities of actual experience; and now that rest and the sunny southern climate have, in a measure, restored me to

health, I am desirous to make the Riviera, and especially Mentone, known to the tribe of sufferers obliged to fly from England, "merrie" in winter only to the hale and strong, who can defy and enjoy the cutting winds, the rain, the snow, and the frost of a northern land.

The peculiarly mild climate of western Italy, and especially of the coast-line of the Gulf of Genoa, known under the name of Riviera di Levante, and Riviera di Ponente, or Eastern and Western Riviera, is much more referable to the protection afforded by mountain ranges than to latitude. The Alps and the Apennines form an immense screen to the north-east, as will be at once perceived on consulting the map of Europe. The Swiss Alps, which terminate rather abruptly in the plains of Piedmont, by the grand Alpine heights of Mont Cenis, Mont St. Bernard, Mont Simplon, &c., are continued in Savoy and Dauphiny down to the Mediterranean at Cannes and Nice. From Nice the mountain range, which then takes the name of Maritime Alps, skirts the shore of the Gulf of Genoa in a north-easterly direction as far as that city, and in a south-easterly direction as far as Lucca. At Genoa it unites with the Apennines, or sooner becomes the Apennines. At Lucca the latter leave the coast, and then occupy the centre of Italy, forming a kind of backbone, as far south as the Gulf of Otranto.

It is owing to this geographical fact that the health climates of Italy are limited to its western shores. The mountains we have described separate Italy into two longitudinal sections, from Nice to the Gulf of Otranto, and as these mountains rise from four to seven thousand feet in height, they constitute a barrier which protects the entire western coast-line from the north-east winds of central and northern Europe. Thence a totally different climate throughout the Italian peninsula, on the east and west of the Apennine ridge. On the eastern, or Adriatic side, in the plains of Piedmont, Umbria, the Marches, &c., owing to the predominance of the cold winds from the centre and east of Europe, the winter and spring are very much colder than on the western or Mediterranean side; the one on which we find the Italian health cities, Pisa, Florence, Rome, Naples. The western coast of Italy is not only thus protected from the north-east winds, but is open to the warm south-west winds, which very often blow from the Mediterranean during the winter, and bring with them warm sea-currents.

This protection from the north-east, and exposure to the south-west, gives to the entire region described, from Nice to Reggio, a mildness of winter climate which latitude alone would not impart. Thus Nice and Mentone, two of the most sheltered and warmest spots on the north coast of the Mediterranean, are situated only in

latitude 42° , considerably more to the north than Marseilles or Montpellier. But the latter are unprotected northwards by mountain ranges, and, consequently, severe frosts take place every winter. Nor is this surprising, when we consider that in the north and centre of Europe the ground is often covered with snow for months during winter, and that a high wind travels at the rate of from thirty to forty miles an hour. The distance, say, from Lyons to the Mediterranean, being merely about two hundred miles, a high north wind would reach the coast-line in a few hours, where unimpeded by mountains, bringing with it cold weather to all unprotected regions.

During the winter the most protected and warmest part of this western coast of Italy is the Riviera di Ponente, or Western Riviera. The exceptionally mild winter climate of this region is principally to be attributed to the mountain range skirting the shore ; so that, as one of its names implies (*Cornice*), the coast-line is a mere ledge at the foot of the mountains which protect it north and east. My knowledge of the Riviera is principally derived from residence at Mentone, for I have merely examined the other parts of the Riviera as a traveller. The general meteorological conditions of the coast are, however, so far identical that I presume the facts observed in one region apply to all, with such slight modifications as the greater or less amount of

shelter implies. I shall therefore first describe Mentone and its climate as I found them, and then point out in a separate chapter in what respect the other regions of the Riviera appeared to me to differ from Mentone.

CHAPTER II.

MENTONE.

SITUATION—CLIMATE AS EVIDENCED BY VEGETATION.

MENTONE is a small Italian-like town of five thousand inhabitants, situated in latitude 42° , twenty-two miles east of Nice, at the foot of the Maritime Alps. It is the first station out of Nice on the Cornice road to Genoa, is the largest town of the principality of Monaco, and has recently been annexed to France along with Nice.

The Gulf of Genoa is formed, as stated, between Nice and Genoa, by the Maritime Alps, the immense masses of which descend to the sea so abruptly in some places as to leave no shore, their beetling crags terminating directly in the sea. This is the case immediately behind and to the eastward of Nice. Owing to this circumstance, there was formerly no continuous land-road from Nice to Genoa. The one that now exists is of recent origin, and has been carried in many places over and along high mountains and precipitous cliffs. Where the shore exists, it is generally a mere rocky, shingly, or sandy ledge, from which the mountains rise directly.

On leaving Nice for Genoa, the road at once begins

to ascend the Turbia, a mountain about 3000 feet high, and one of the spurs that run directly into the sea. It is at the foot of this mountain that Nice lies. The ascent occupies two hours, the descent about the same time, and at its termination is situated the town of Mentone. When the traveller has crossed the Turbia, and begins to descend, a glorious panorama opens before him. The higher mountains receding round a beautiful bay, that opens to the south-east, form a magnificent amphitheatre, which at its centre is about four miles from the sea.

The coast outline of this bay, some four miles in circuit, is divided into two unequal portions by a hill, which gradually slopes to the sea, and on the sides of which climb the houses that constitute the old town of Mentone. The space between the sea and the mountains which form the amphitheatre, and which are between 3000 and 4000 feet high, is occupied by a series of lower hills. The latter slope gently to the shore, and are divided by numerous ravines and torrential valleys. The higher range of mountains, of a greyish-white limestone, is generally precipitous and bare, all but destitute of vegetation. The lower hills, which rise gently to a height of from 500 to 1500 feet, are densely covered with olive-trees and pines, and present at a distance the aspect of forest-elad, rounded ridges, gently descending to the sea.

Thus the bay in the centre of which Mentone is placed, with its background of swelling olive-clad hills, forms a kind of amphitheatre, thoroughly protected from the north-west, north, and north-east winds by the higher mountain range.

To thoroughly understand and appreciate the district, and its singularly protected character, a boat should be taken and the panorama observed a mile or two from the shore. The extreme beauty of the view will amply repay the trouble. Thus seen, all the details are blended into one harmonious whole, the two bays becoming one, and the little town scarcely dividing them. The grandeur of the semicircular range of mountains, generally steeped in glorious sunshine, also comes out in broad outline. These mountains positively appear to all but encircle the Mentonian amphitheatre in their arms, thus to separate it and its inhabitants from the world at large, and to present it to the blue Mediterranean waves and to the warm southern sun.

Some twenty miles beyond the mountains which thus form the background of the Mentonian valleys, are the still higher mountains of the Col di Tende, 7000 feet high, which constitute the main mass of the Maritime Alps. They extend for sixty miles inland, and greatly increase the protection. Indeed, the bay is only open to the south, south-east, and south-

west. Consequently, the mistral, as a west or north-west wind, is not at all felt; and but very slightly as a deflected south-west wind. The north wind passes over the higher mountains and falls into the sea at some distance—a couple of miles—from the shore. When it reigns, there is a calm at Mentone, and the sea near the beach is also calm, whilst at some distance from the shore it may be crested and furious. This I have often witnessed from the hills. The north-east wind leaves the town and hills untouched, but when strong, raises a heavy sea; whilst the east (the *levante*), the south-east (the *sirocco*), and the direct south, blow directly into the bay, and always occasion a heavy, rolling swell.

Climate as evidenced by Vegetation.—Owing to the complete protection from the west, north-west, north, and north-east winds, and owing to the reflection of the sun's rays from the sides of the naked limestone mountains which form the amphitheatre, the winter climate of Mentone is rather warmer than that of Nice—warmer, indeed, than that of any part of the northern or central regions of Italy. The peculiar mildness of the winter at Mentone may also be partly accounted for on geothermal (earth heat) grounds. It is well known that even in England the warmth imparted to the superficial strata of the ground by the summer heat is not exhausted by radiation until the

winter be far advanced. Thus, at three feet from the surface it is only at the end of January that the soil has cooled to its lowest point; that is, has exhausted by radiation the heat accumulated during summer. How much more decided must be the winter radiation of summer-accumulated heat in a locality like Mentone, surrounded by an amphitheatre of limestone rocks, which must become heated to an extreme extent during the long summer days under the rays of an all but tropical sun and in a cloudless sky! The importance of this element in the consideration of climate will be better appreciated when we know that it takes several months for a thermometer to cool down after the glass tube has been closed by momentary exposure to the flame of the blowpipe.* It is only after that lapse of time that the glass has regained a normal state, and that it can be graduated, when scientific precision is in view; so retentive of heat are most solid bodies, and so long a period of time does it take for them to lose by radiation heat once acquired.

The exceptional warmth of the winter climate of Mentone, even for the Riviera, is proved by the presence of groves of large, healthy lemon-trees, which occupy the sheltered ravines and the warmer hill-sides, wherever water can be obtained; constant irrigation, summer and winter, being necessary for their culti-

* Drew's Practical Meteorology, p. 42.

vation. They are, indeed, much more numerous than the orange-trees, although many fine plantations of the latter are found throughout the district. Orange-trees can bear without injury several degrees of frost, whereas two degrees destroy the fruit of the lemon-tree, and three or four degrees would destroy the tree itself.

On one side of the second bay, near the Pont St. Louis, the warmest and most sheltered region of Mentone, the side of the mountain is partially covered with lemon-trees, which ascend on terraces to a considerable height above the sea. In these "warm terraces" winter certainly may be said not to exist. Throughout its entire duration insect life is abundant. The lively lizard never hibernates, but daily basks and darts about in the sun. The spider spins his web, finding abundant food, and the swallows never migrate; they are constantly seen circling among the rocks. The harebell, the red valerian, violets, and our own pretty veronica, flower in December and January in this favoured spot long before they appear elsewhere.

The lemons produced at Mentone are known throughout Northern Europe, and fetch a high price in the market. The lemon-tree at Mentone flowers all the year through, never resting, and bears four distinct fruit crops. Its existence in groves of large trees, from twenty to thirty or more years old, without artificial protection, and its profitable cultivation throughout

the year, prove that there must have been freedom from severe frost for many years. I was told, however, that about twenty-five years ago, nearly all the lemon-trees in the country were destroyed in one night, which may account for no very old trees being seen.

During the severe winter of 1859-60 the thermometer descended to zero several nights consecutively near the seashore. Slight films of ice formed on shallow pools on the road and near the torrents, and the highest mountain range was covered with snow to the level of the olive groves. This alarming state of things occasioned great dismay in the minds of the inhabitants, whose principal riches are the lemon groves. For several nights many of them sat up, in the greatest consternation, watching the thermometer. Indeed, there was a complete panic with reference to this lamentable and unheard-of condition of the weather. Such feelings and fears plainly indicate that frost and snow are very unusual and unwelcome visitors. Snow often lies for a few days on the higher mountains in a most picturesque manner, but on this occasion it appeared even on the shore level.

On no other part of the Cornice road do lemons grow as freely as at Mentone. At Cannes they are all but unheard of, and at Nice they only grow in sheltered and protected sites, and not luxuriantly. The latitude of Sicily, which is four degrees further south,

must be reached to find the lemon-tree growing with the same luxuriance.

The orange-tree flowers but once in the year, and bears one crop of fruit only. It is a more hardy tree, as this botanical fact implies, and can bear without injury several degrees of frost. This impunity does not, however, apply to the same extent to the fruit, which matures in autumn and winter, and does not attain excellence where the winter is cold. There are many fine groves of orange-trees at Mentone, especially the one at the base of the Cap Martin. Although the trees are large, and the fruit ripens well, the oranges are scarcely equal to those we get from the Azores. I am inclined to think, however, that the deficiency is owing more to neglect in cultivation than to defective climate. Some produced by trees growing in the vicinity of Monaco, only a few miles distant, and in a locality presenting the same climatic condition, are ripe early and of first-rate quality.

Another consideration to be borne in mind is, that oranges intended for exportation are invariably gathered before they are really ripe, as otherwise they would not bear the packing and transport. They are then sour, and require time to ripen them. Those exposed for sale at Mentone are a part of the oranges picked under these conditions. The only way, therefore, to have really good oranges is to purchase, as some have

done, the crop of one or more trees, and to leave the oranges on the tree until they are really quite sweet and ripe. This would not be until April or even May.

The crop of an orange grove or orchard is generally sold on the tree to speculators from Paris for a given sum. The latter undertake the picking and packing, and in March the town and country are quite alive with their operations. Troops of girls and women may be seen daily coming down from the mountains with large baskets of oranges or lemons poised on their heads. They carry as much as a hundred-weight or more at a time with apparent ease. They are generally barefooted to enable them to get a better grasp of the rocky paths, and look very picturesque. Only the strongest and healthiest girls can undertake this work, and that only for a few years. They will go to and from the mountains, a distance of from three to six or eight miles, several times a day, and gain about fifteen-pence daily.

Throughout the winter the orange groves, covered with their golden fruit, form quite a feature in the landscape, reminding the looker-on of the garden of Hesperides of olden times. From the regularity of its growth, the abundance and golden hue of its fruit, the orange-tree is a much more picturesque object than the lemon-tree. The fruit of the latter is always either green or a pale yellow, and the habit of the tree, young

or old, is rather straggling. Both lemon and orange-trees, whenever they emerge from the valleys, contrast vividly, by their bright green tinge, with the sombre green of the olive trees.

The olive-tree is the real lord of the Mentonian amphitheatre, covering the lower hills and the base of the higher ones to a height of about fifteen hundred feet above the level of the sea. In the south of France the olive-tree, however fertile, is a miserable object. It is generally treated as a pollard, is small and dwarfish, and looks much like a dust-covered pollard willow. As soon, however, as the Estrelle mountains are passed, and Cannes is reached, we enter on a different climate, more protected in winter, and more suited to its growth. It is here allowed to grow as a forest tree, and at once assumes a dignity and grandeur which quite surprises those who have only seen the stunted specimens of "la belle Provençe." The olive-tree can bear with impunity several degrees of frost, so that it is not injured or destroyed on the Riviera by exceptional winters, as are the delicate lemon-trees. No frost to which this region is exposed on the coast, even once in a century, can injure it, so that it goes on growing indefinitely, and attains its natural period of longevity, as do with us trees natives of our country, such as the birch, the beech, the Scotch fir, and the oak. Like them, it resists the terrible cold of exceptional years, such as the one

we have just passed through (1860-1), and reappears in spring hale and vigorous, when whole armies of naturalized foreigners have succumbed.

The longevity of the olive-tree in a congenial climate like that of Mentone, may indeed be said to be indefinite. There are olive-trees still alive at Monaco, at the Cap Martin, and elsewhere, which are supposed to be coeval with the Roman empire. It is a slow-growing tree, and forms cartloads of hard roots, which fill and cover the ground where it stands. When, after several hundred years, the trunk decays, the bark remains alive. As the decay progresses, the tree splits, as it were, into two, three, or more sections. The bark twists and curls round each of these decayed sections, and unites on the other side. Then, instead of the old tree, we have, in its place, two, three, or more, apparently separate, although in reality all growing from the same root. When these in turn die, new shoots spring up from the old roots, and thus the life of the tree is indefinitely prolonged. The old olive-tree groves are, from this cause, indescribably singular and interesting, presenting on every side evidences of hoary old age. All the stages of growth above described may be witnessed within the space of a few feet; and the partially decayed, partially split, gnarled, twisted, curved trunks are picturesque in the extreme.

The healthy full-grown olive-tree is really very

beautiful. It is often as large as a fine old oak, but with fewer limbs and a more sparse foliage. In the olive-tree the terminal extremity of the branches hangs down, so as to give it the characteristic appearance of a weeping ash or willow. The "weeping" character of the tree is, however, much less marked than in those just mentioned, owing to the more scanty foliage, and to the extremities of the smaller branches only drooping. To some who are sad, to mourners, the dense masses of these sombre-hued trees, with hanging foliage, give a sorrowful, mournful character to the landscape. But it is only those who have sadness in their hearts, a sadness which deflects on nature, who view the olive-tree in this light. To others, the play of the wind on the ever-moving pendulous masses of foliage, and that of the sun and light on the dark green leaves, is both beautiful and soothing.

I never fully appreciated the beauty of the olive-tree, although I had seen it in its glory in Southern Italy, until I had passed a winter under the shadow of an olive-clad mountain at Mentone. The fact is that the olive-tree, like our own evergreen spruce and Scotch fir, is much more beautiful in autumn and winter than in summer. At the latter period of the year most of the leaves are old, and have become browned by the summer heat and by at least a year's existence, so that the entire tree often assumes a faded, dingy hue. In

early summer, too, the yellow hue of the pollen of the male flowers, gives a yellowish tinge to the entire tree, owing to their extreme abundance. In spring the new leaves form, in summer and autumn the old ones are in a great measure cast off, and when winter comes, the evergreen tree is in all its glory. It has thrown off its worn-out damaged garments, and is again clothed in the grace and beauty of youth.

Thus, instead of the brown, dust-coloured foliage which the pleasure traveller sees in his summer journey, the winter invalid sees leaves, sombre, it is true, but fresh and beautiful to look at, either from near or from afar. The scantiness of the olive-tree foliage in winter, also, is an advantage. It lets the sun filter pleasantly through, breaking its power without concealing it, and rendering a walk or a lounge in "the olive-groves," even in the hot midday sun, a pleasant resource. Many and many an afternoon have I spent at Mentone, in December and January, sitting with a book under the shade of an olive-tree.

The predominance of these olive groves gives a very peculiar character to the Mentonian amphitheatre, a Scriptural character, if I may so term it. The olive-tree is the tree of the Holy Land, of Palestine, and is constantly mentioned in Scripture. Thus its presence, as the principal feature of the surrounding vegetation, imparts an Eastern charm to the place, taking the mind

back to the Mount of Olives, to Jerusalem, and to the sacred scenes of the Holy Writ. We feel that it was in such a land that the events we have read of from our childhood upwards with reverence and interest, took place. We feel that we are nearer to these scenes than in our own northern island, and we really understand what it is "to sit under the fig-tree," and to walk "in the olive grove."

The olive-tree flowers in April, and bears every year. But a year of abundance is generally followed by one or even two of comparative sterility. It has to be well manured every second or third year, in order to secure its fruitfulness. For this purpose the favourite manure is old woollen and linen rags, which are imported from Italy in boat-loads; and such rags! I verily believe that even our paper manufacturers would scorn them. A trench is dug round the trunk of the tree, some two feet deep, and three feet wide. In this trench the rags are placed: they are then soaked with liquid manure, and covered up; a process which no doubt destroys a vast amount of life. Although done by mere routine, this system of "arboriculture" is chemically judicious. Wool contains more nitrogen than most other animal substances, so that the rags must be and are valuable as manure.

The olive-berry ripens in the autumn, becomes black, and begins to fall off the tree in January. Some have

the trees at once cleared by beating the branches with long eanes. In that case the oil is not so abundant, but is of better quality. Others leave the berries on the trees for a couple of months longer; until indeed they nearly all fall off. The oil made from these berries is more abundant, but not so good in quality.

Picking the olive berries from the ground underneath the trees, is quite an occupation with old or infirm women, and with young girls. They gain about fifteen sous (8d.) a day, and contrast strikingly with the strong ruddy orange and lemon girls. Many no doubt commence as the latter, strong in youth and health, to end by olive-picking, once the heyday of life is over. The olive-pickers are apt to become rheumatic from kneeling so long over the ground, at times damp from the winter rains.

The olives once gathered are taken to the olive-mills, where they are crushed, and the oil is extracted. These mills are mostly picturesque buildings situated in the ravines. In some water, in others horse power is used. The olives are crushed by stone rollers; the pulp is put in stout cylindrical baskets, saturated with hot water, and subjected to great pressure. The water thus squeezed out carries the oil with it to vats, where it floats on the top and is skimmed off. The water, when it has thus done its duty, is of dark brown colour, and

is constantly seen coming down the ravines, colouring the water-course.

Another evidence of the exceptional warmth of the winter climate is the presence of large euphorbia bushes and of large carouba-trees. The euphorbia in this region becomes a shrub, with a ligneous stem. In many of the more protected regions they grow as large as rhododendron bushes. At Nice I only found them as luxuriant in one spot, the south-east side of the castle hill. In Italy the latitude of Sicily must be reached to find them equally luxuriant. They are singular plants, and grow in the most arid spots, on heaps of stones on the seashore, in the crevices of rocks, with a vigour and luxuriance which is perfectly surprising. Their growth seems to begin with the autumn rains, when they throw out a mass of light-green terminal leaves: and they flower throughout the winter, early or late, according to species. The secret of the luxuriant verdure, under a burning sun, in the most arid spots, of such a mass of delicate foliage, is the existence of a kind of caoutchu in their white acrid juices. This gum prevents the evaporation that would take place from the leaves, and which would soon dry up the foliage of a plant growing under such circumstances, without some peculiar protection.

The elegant white silver-leaved cinerea maritima is found abundantly in the same localities. It grows

from crevices in sheltered rocks, generally in the immediate vicinity of the sea, and often attains the size of a large bush. This pretty shrub has been introduced into our conservatories for the sake of its foliage, and it is pleasant to find it in its native clime.

The carouba or locust-tree is really one of the glories of this and of other barren but warm regions in the south of Europe. It is a beautiful evergreen tree, vigorous, fresh, and graceful, with an abundant light-green foliage. It grows in the most stony, arid, and burnt-up places; on rocks and on mountain sides where there is not a particle of soil, and where its very existence is a marvel, a problem, a source of positive exultation to the beholder. Indeed, the carouba may be considered an emblem of evergreen vegetation, and a perfect botanical demonstration. It bears beans in pods, very useful for the nourishment of cattle. Such a tree cannot live from its roots, for they often only bind it to the rock on which it grows, by creeping into crevices, and laying hold of every inequality of ground. It must live in a great measure by its leaves, as most evergreens do to a very considerable extent.

The very existence of the carouba shows why vegetation is principally evergreen in arid rocky spots, where there is but little soil, and that little is principally formed by the pulverization of rocks. The scanty soil will not feed plants that only bear leaves for a few

months in the year, wherewith to extraet nourishment from the air. So nature supplies their place by evergreens, which have all the year round millions of lungs, in the shape of leaves, pumping nourishment, in the form of carbon, from the air. In northern climates, in high latitudes, in arid sandy soils, it is the evergreen eonifers or fir tribe, the heaths, and the hollies, that thus apply to the air for the nourishment refused to them by the soil. In southern latitudes, such as Mentone, it is the orange, the lemon, the olive, and higher up in colder regions conifers again as in the north, that play the same part. Thus is explained the fact of the vegetation of the Mentonian amphitheatre, a mere rocky mountain-side, being nearly all of an evergreen character. No other kind of vegetation could live and thrive there. The few deciduous trees, such as oaks, planes, and willows, that are found, are principally met with along the margin of the torrents as they approach the sea, where alluvial soil has been deposited.

Along with the carouba may be mentioned the lentiseus, as peculiarly indicative of a dry, sunshiny, southern climate, and of a rocky, arid region. It is an evergreen shrub, which grows freely in the same regions as the earouba, flowering during the winter, and is very abundant between Nice and Ventimiglia, indeed all along the Riviera. I found it even more so

in Corsica, where it contributes to form the maquis or brushwood. It forms, I believe, one of the chief botanical features of Palestine and Syria.

Above the olive-tree elevation, that is, above 1500 feet or thereabout, pines only are met with naturally, although fruit-trees, apples, pears, cherries, and vines, are cultivated, as around St. Agnes, a mountain village. The pines occupy the higher regions of the lower hills, and climb up the base and, where not too precipitous, the sides of the highest or back mountain range. From the shore level they appear mere shrubs, owing to the great elevation, but once they are reached, they prove to be respectable-sized trees. Still these pine forests certainly contain no timber "fit for building men-of-war," as a member of the House of Commons recently stated during the debate on the cession of Mentone and Roeeabruna to France. They contribute but little to the wealth of the country, and are only used as firewood, and for building purposes.

The rarity of deciduous trees gives a peculiarly smiling, cheerful, summer aspect to the entire district, with its hills, ridges, and valleys, even in mid-winter. In no part of Italy that I have visited have I observed the universal winter verdure here witnessed. We meet with it in our own forests of Scotch or spruce firs, but then the winter sky is generally sombre, filled with masses of lead-coloured clouds, and the sun is

obscured. At Mentone, on the contrary, the sun mostly shines, and generally throws a greater glow on the landscape in January than it does on our evergreen forests in July. The verdure at first appears rather sombre, as it is principally formed by the olive woods, the orange and lemon-trees generally hiding in the valleys, but the eye gradually gets accustomed to the hue. In the eastern bay, on the hill-side, however, as we have seen, there is quite a grove of light-green lemon-trees.

Owing to the absence of frost, many of our English garden flowers, which are cut down by the first frosty night, continue to flourish and bloom all the winter through. This is the case, for instance, with the geranium, the heliotrope, the verbena, the nasturtium, and some kinds of hardy roses, which continue to flower freely throughout the winter in many gardens. The nasturtium, an annual with us, becomes a perennial ligneous shrub, as in Peru, its native country. There are also many flowers peculiar to the South which bloom throughout the winter. Violets appear about the middle of December in the warmest spots. By the end of January they have become a weed, flowering from every wall and in every torrent-bed that the sun reaches. The delicate lycopodium of our hothouses and conservatories replaces or accompanies the mosses of our climate, growing freely in all damp places through-

out the winter. Anemones begin to blossom early in January, and are rapidly succeeded by daffodils, narcissuses, hyacinths, tulips, gladiolas, hepaticas, and primroses. They are found wild, but only in certain regions known to "the initiated" and to some of the donkey women. The white alyssum, which we use for garden edgings, is very common, and flowers throughout the winter, as does a large species of daisy.

Mignonette grows wild in some localities, on the terraces of the eastern bay, for instance, but it has but very little odour, although the African shore of the Mediterranean is the native country of the sweet-scented species (*Reseda odorata*). The pepper plant, a tropical shrub, thrives and produces fruit abundantly, a fact in itself evidence of a warm climate. It is a deciduous shrub, and losing its leaves early in the autumn, merely to regain them late in the spring, it does not contribute at all to winter decoration. There is a pepper-plant root, growing out of a terrace behind the Pension Anglaise, which is said to have been there at least three hundred years, as evidenced by authentic records. The pepper-tree, a different plant, is cultivated in gardens, on account of its foliage. It remains in leaf during the greater part of the winter.

Succulent plants thrive wherever planted, but, with the exception of the stonecrops, do not grow wild. The mesembryanthemums are peculiarly luxuriant in their

growth, and brilliant in their bloom. The absence of winter frost, the heat and dryness of summer, and the heavy rains of autumn and spring, seem rather to assimilate the climate to that of their native country, the sandy plains of the Cape of Good Hope. They are generally in flower by the end of April.

The prickly pear (*Opuntia vulgaris*), the commonest of the cactaceæ in Europe, flourishes in this climate as well as in the rocky mountains of Mexico, its native country, as may be seen by the thriving specimens at the entrance of the town.

The aloe is equally at home in this district, indeed throughout the Riviera. But at Mentone it does not seem to be appreciated as at Nice, where many magnificent specimens are to be seen. Indeed, the Mentonians do not appear to value landscape gardening, or gardening of any kind. Very few flowers are cultivated, except for preparing perfumes, or in the gardens attached to the houses let to strangers. They seem to think it a loss of time to bestow labour or trouble on anything that is not destined to be consumed as food. This complete absence of the intense love of flowers and ornamental gardening which pervades all classes in more rigorous climates, characterizes Southern Europe—Italy, France, and Spain. Where do we see the rose, the elematis, the jasmine, climbing over the peasant's cottage as in England? I have been told

that one reason is the difficulty of keeping plants alive and flourishing without watering during the long droughts, and the general difficulty of finding water. But this does not apply to the aloe or the cactaceæ, which delight and thrive in the driest regions. And what can be more grandiose than the immense aloes seen in the vicinity of Nice, vegetable giants, one of which is often as large as a small house! Is there not also intense interest in watching the large flower-spike which, after the aloe has lived a long life of dignified repose, shoots up in a few weeks, on a stem like a small fir-tree, from twenty to thirty feet high, utterly destroying by its rapid exhausting growth the parent plant? Every winter many of these destructive children may be seen rising from the unfortunate parent, doomed to die with its offspring, among the aloes at the château at Nice. At Monaco there is a regular garden of young aloes on the terrace, but smaller, and of more recent growth.

The lily tribe, to which the spiny aloe belongs—unlikely as it may seem to the non-botanical observer—has another representative at Mentone which covers the terraces in February with white clusters of lovely flowers, and which we can also claim, the common garlic. To the same natural order belongs the asparagus, which grows wild in this district, as it also does in England.

The oleander, or rose laurel, as the French call it, with us a stove plant, grows in the open air to the size of a small tree. It may be seen both along the western and the eastern bays, along the sea-shore. It flowers in the summer and early autumn, and as neither its habit nor its evergreen foliage are remarkable, it does not attract much attention. The tamarisk, with us a well-known sea-side shrub, also becomes a small tree with a good-sized trunk. As with us, it loses its foliage in winter, but regains it early in April. There is a row of these tamarisk-trees skirting the beach in the eastern bay. They grow in the shingle that forms the beach, a few feet from the sea, thus illustrating, as in the north, their peculiar marine sympathies. Some plants, like some men, thrive anywhere, are cosmopolite, whilst others flourish only in their native soil, under special conditions, and without them pine and die.

As illustrative of the cosmopolite plant may be mentioned the friend of our childhood, the common blackberry, which we are glad to welcome even at Mentone. In the warmest, wildest, and rokiest regions it grows as vigorously, as joyously, as in any quiet lane in England or Scotland. Only, in such situations it becomes an evergreen—in this sense, that it does not lose one set of leaves until it has got another. It is, in truth, a singularly hardy plant, with a most peculiar power of

adapting itself to circumstances. All climates seem to agree equally well with it—hot or cold, rainy or dry, maritime or inland, plain or mountain. I have never been to a spot in Europe where I have not found it, from Sutherlandshire to Mentone. I must, however, confess to a certain degree of surprise when I saw this favourite of our shady English lanes growing at Mentone with wild and determined luxuriance, filling up the bed of dry torrents, climbing up trees to a height of twenty or thirty feet, and choking passages between lemon terraces on the mountain-side; and that in regions where it often does not rain in summer for six months together, and under the glare of the fierce Mediterranean sun. Certainly it must have a mission to fulfil. Its sight is always welcome, as is all that reminds the sojourner in foreign lands of his native country and of the haunts and pleasures of his early days.

The firs which cover the sandy hills, and climb up the limestone mountains, are the *pinus maritima*, the commonest conifer on the coast of the Mediterranean. They do not attain any very great height, but are healthy and flourishing. In one spot, near the Prince of Monaco's villa, in the western bay, are some very fine specimens of the stone or umbrella pine, the classical pine of Italy and the Tyrol. One, more especially, is a very beautiful tree, throwing up a taper-

ing stem surmounted by an immense umbrella-like mass of brilliant deep green foliage. There is something peculiarly Italian in the appearance of this noble tree, with its canopy of rich green leaves extending table-like. In Italy it is so often a prominent feature in the landscape, that it becomes associated in the traveller's mind with the monuments and ruins indelibly stamped on his recollection. Indeed, when sitting under the shade of these trees, the deep blue sea at our feet, the clear sky above, and the sharp clear outline of the adjoining mountains around, it is impossible not to feel that we really are in Italy, notwithstanding diplomatic annexations.

The deciduous trees are principally planes, willows, and fig-trees. The willows line the margin of some of the larger torrents as they approach the sea. The planes are planted in two avenues, for the sake of the dense and grateful shade they give in summer. One avenue is in the main street of the town, the other is along the banks of the torrent which descends from the mountain by the side of the Turin road. It is the principal summer promenade of the inhabitants.

The Oriental plane has been cultivated from time immemorial in Asia Minor and Greece, and from the time of the Romans in Italy, but for its shade only, the wood not being valuable. In former days it was treated with great reverence and respect. No tree in these climates

can be compared to it for beauty and density of foliage in summer. In the south of Europe, and in the East, it is a hardy, vigorous tree, attaining very great size, and flourishing in the midst of towns. This latter power it may owe in part to its habit of shedding yearly part of its bark; and thus, as it were, getting rid of its soiled outer garments, contaminated by the town atmosphere. Its power of resisting city influences is well exemplified at Toulon. The dense and healthy grove of trees that casts so impenetrable a shade on the "Place" in the very centre of the town, is composed entirely of plane trees. From this tree bearing cutting as well as an English holly, the top branches are generally clipped back ruthlessly in towns when spring arrives, so that it may form, by its new shoots, a regular canopy of verdure. Many of my readers have no doubt been awakened at early dawn by the chorus of the innumerable birds that frequent the verdant groves of the Place at Toulon.

These trees do not lose their leaves until the nights become cold, so that sometimes they are preserved until the end of December. The ball-like seeds remain hanging from the terminal branches all winter. The trees are clipped early in March. The new flowers and leaves appear in April, the former preceding the latter. The plane tree, although quite at home, does not appear, however, to reach its full size in France and Italy.

There is a plane-tree in the Gulf of Lepanto in Greece, the trunk of which is forty-six feet in circumference; and one on the Bosphorus, the trunk of which is one hundred and forty-one feet in circumference at the base. De Candolle thinks it must be two thousand years old, and that it is one of the largest trees in the world.

Fig-trees thrive, as everywhere else in Italy. Fortunately, however, for the lovers of the picturesque, they are not very numerous at Mentone. They lose their leaves early, by the end of November, and do not regain them until April, and their clumsy, graceless, weird-like branches, are anything but ornamental during the winter.

In early spring a very familiar plant shows its large, velvety, mealy leaves, in many places, on the road sides, at the bottom of walls—the verbaseum. At the same time appears in great abundance and luxuriance, in the same regions, a large, elegantly-variegated white and green thistle. They both are in flower early in April, as also is the *antirrhinum*, or snap-dragon, which is found wild on the warm terraces. It belongs to the same natural order as the verbaseum, that of the *serophulariaceæ*. This is also the time when the elegant little grape hyacinth, the star of Bethlehem, the cistus or rock rose, the prickly broom, the *eytismus*, and many other beautiful flowers are in full bloom, and render the ravines and terraces regular gardens. I

must not either forget to mention the orchids, of which many different kinds are found—the fly orchis, the spider orchis, the orchis lutea, the long-bracted, &c.

The vegetation of course varies according to the nature of the soil. Some of the lower hills are of sandstone, which impresses on the flora its peculiar character. The trees are pines; the shrubs, the arbutus, the myrtle, the juniper, prickly broom, mountain lavender, and heath. At Christmas, our common ling heath is in full flower. Another very beautiful heath — the Mediterranean or herbaceous heath — flowers in February and March. It has an erect stem, which rises to the height of five or six feet, and its spikes of numerous white flowers are very lovely. A species of evergreen, creeping smilax, or sarsaparilla, with variegated triangular leaves and groups of red berries, is very common.

Our old friend the ivy is constantly met with in the valleys and watercourses, wherever the soil contains lime. Ferns are very numerous throughout the district, and their growth is favoured by the peculiar structure of the terraces. The walls by which these terraces are bounded are formed by the simple superstructure of large stones, and the earth gradually filtrating into their interstices, forms a cool, damp bed, admirably adapted to their growth. All the old terraces are clothed with the ceterach fern, the asplenium tricho-

manes, and the *asplenium adiantum nigrum*, which with the *capillus veneris* or maiden-hair fern, are the most common. The latter is a mere weed, and waves its beautiful fronds near every tank, every brook, every small irrigation canal—indeed, wherever there is either running or stagnant water. The *pteris aquilina*, or brake fern, is common, but it is a summer fern, as with us, its fronds only appearing in April, when the invalids are preparing to migrate northwards. The *seolopendrium*, the *polypodium vulgare*, the *ruta muraria*, the *asplenium Petrarchæ*, the *grammitis*, and the *echeilanthes odorans*, are less universally distributed, although by no means uncommon. On the whole, I found twelve different species of ferns, most of which are also met with in England. I was rather surprised in the summer that followed my first winter at Mentone, to find the *asplenium trichomanes* growing with equal luxuriance on the ruins of an old chapel in a solitary islet at the northern extremity of wild and beautiful Loeh Awe, in the far north, on the west coast of Scotland.

All the cultivated vegetation of the Mentone amphitheatre—lemon-trees, olive-trees, &c.—except what grows on the narrow seaboard, is on terraces, and has been the product of the labours of countless ages. The mountains and hills rise too rapidly from the sea level for even olive-trees to grow without this preliminary

step being adopted to support and form the soil. A terrace is a ledge cut in the hill-side. The stone taken out of the hill forms the outer wall, the dust and broken stones the soil. These terraces are very expensive to make,—as much so, I have been told, as houses ; whereas the product is prospective only. The man who builds them sinks his capital for his children's benefit, not his own. If he plants lemon-trees, he must also dig a large tank, and be able to get water to fill the tank, in order to irrigate them in the rainless summer. If he plants olive-trees, they grow so slowly, that in twenty years even the produce is insignificant. On the other hand the stones have to crumble into soil, under the influence of moisture, wind, and weather, and manure has to be added, before the terrace can produce the green crops, which are generally planted on those occupied by young trees.

And yet the mountain-sides are scarred with these terraces, which rise in successive tiers, and are the foundation of the agricultural riches of the country. They are the evidence in stone of the thrift and industry of past generations—a silent but eloquent monument of the domestic virtues of the forefathers of the present race.

CHAPTER III.

GEOLOGY.

THE NUMMULITIC OR TROPICAL PERIOD.—THE BOULDER DRIFT OR GLACIAL PERIOD.—THE BONE CAVERNS.—PRE-ADAMITE MAN.—AGRICULTURAL GEOLOGY.

THE geological features of the country are very interesting, and much may be observed in a small compass. The high range of mountains which form the amphitheatre are of secondary Oolitic or Jurassie unstratified limestone. At both the eastern and western extremities of the Mentone Bay this formation juts out into the sea. At the eastern extremity, the road to Genoa is cut out of the side of the mountain, and ascends to a great elevation, crossing a deep ravine by a bold bridge, the Pont St. Louis. A short distance on each side of this point are observed the strata which replace the chalk formation in Italy. Then commences the tertiary system by a well-developed nummulitic limestone, full of nummulites, which is followed by other representatives of the miocene, pliocene, and pleistocene groups.

These strata are observed on both sides of the Pont St. Louis, in the same order, eastwards towards the town of Ventimiglia, and westward to Roccabruna,

at the base of the Turbia ascent. At both these points appear the pleistocene boulder drift. Thus the lower hills, which occupy the ground-plan, as it were, of the Mentone amphitheatre, represent, from east to west, the different strata between the secondary Jurassic oolite and the tertiary boulder drift. These tertiary strata are also reproduced in the same order, between the St. Louis rocks and Ventimiglia, where the boulder drift is found equally well developed.



NUMMULITES.

1, 2, *Nummulites lævigata*; 3, Section of do., showing its cells.

This boulder drift is magnificently developed both at the entrance to the Mentonian amphitheatre, on the Nice road and above the village of Roceabruna, and seven miles further on, at Ventimiglia. It is, indeed, the most interesting feature in the geology of the district. The deposit is composed of large rounded stones, imbedded in calcareous gravel, constituting what has been termed pudding-stone, and is very extensive. The village of Roceabruna is built on it, and it ascends

much higher on the sides of the mountain along the Nice road. Tradition says that Roceabruna was once some two hundred feet higher up the mountain side, but that a gigantic land-slip occurred, and that the bed of boulders on which it was built descended bodily to its present position. I much doubt, however, the veracity of this the popular view as to the original habitat of the "brown rock" village.

The interest connected with this really beautiful specimen of glacial boulder drift is in its bringing home to us, "in words of stone," one of the most interesting phases through which the world has passed during recent geological periods. The word recent, however, must be understood to apply to periods separated from us by countless ages, and only recent as compared with the unfathomable periods of time during which the primary and secondary strata were formed.

The Oolitic or Jurassic limestone rocks, which form the basis of the Mentonian amphitheatre, and the strata therein found that correspond to our chalk or cretaceous era, represent the highest or most recent formations of the secondary period of geology. With the nummulitic limestone which crowns the St. Louis rocks; and which is being quarried for building purposes where the first descending eastern bend occurs, begins the eocene or tertiary formations.

During this period of the earth's history and the sub-

sequent or miocene period, the climate of Europe was warm or subtropical. The vegetation was all but that of the tropics of the present day, as testified by the beds of lignite or wood coal belonging to this period, which are found in these strata, in the Mentonian amphitheatre as elsewhere. I have seen thin beds of lignite coal in the tertiary rocks which were blasted for the foundation of the church. The animals of the latter tertiary period were the large and curious precursors of the present races. An idea of these animals may be gained by the specimens that have been so curiously reproduced in the gardens of the Crystal Palace. They were remarkable for their size and development, which indicated favourable conditions of material life, abundance of food, and a genial climate.

The sea and rivers were also peopled by exuberant and grandiose life, indicative of tropical warmth—large sharks and rays, turtles, hippopotami, and such like. It was at this time that were living in boundless profusion in the warm seas the nummulites, or cone-like shells, found in the St. Louis quarry. So abundant were they in the seas of those days that thousands of miles of nummulitic limestone, several hundred feet in depth, all but entirely composed of their remains, are found in some regions of the Old World.

Then a dark cloud came over the earth. From some unknown cause its temperature lowered, and the glacial

period set in. Part of Europe and Asia subsided under the sea as the climate became cold. Glaciers established themselves on the mountains of a considerable portion of what remained of the Europe of to-day, and on other regions now submerged, down to the 42nd parallel of latitude. The tropical vegetation gave way to a northern flora. The tropical animals died out or emigrated to more southern regions, and were superseded by new forms of life more adapted to a boreal climate.

The material world went on as before under the influence of the same laws. The rain, the frost, the air disintegrated the rocks, the detritus of which was carried by rivulets and rivers to the sea. These fragments, large and small, were rounded and polished both by the action of the waters that brought them from the heights, and by the action of the seas to which they were carried; as is the case with the shingle on modern shores. Huge portions of the glaciers, that reached the sea in many places, were broken off during the short summer. Covered with rocks, stones, and sand, which they brought from the mountains, in the ravines of which they were formed, they sailed out to sea. Tens of thousands of icebergs now sail every summer in the same way, into the Atlantic from the North Pole. On melting, their cargo of gravel—for of such is gravel—of boulders, and of large rocks, would be deposited at the bottom of the ocean.

After an incalculable period of time a change again came over our globe. The warmth of the sun again reached us, and the submerged portions of Europe, Asia, North America, &c., again began to rise; as also, no doubt, did regions which for the first time appeared above the waters. This rise appears to have been gradual, as well as the improvement in climate which accompanied it. Thus by slow degrees the present state of the earth was attained.

The boulder drift at Mentone is the evidence of the glacial period having passed there. It was formed as described under water during the glacial epoch; when, no doubt, the mountains in the background were one mass of glaciers descending to the sea; when the Polar bear roamed on these shores, and Polar fish and shells inhabited these seas. Thus, in this little Mediterranean bay, do we find various important phases of the earth's marvellous history stamped in indelible characters.

On the east of the amphitheatre are the rocks (the nummulitic) which point to sunny skies, warm seas, and exuberant life, existing, probably, with the same outline of mountains countless ages ago. On the west are stones which speak of a Polar cold, of gloom and barrenness, which also must have existed during countless ages. Around is the evidence of another era, the present; itself destined unquestionably to ultimate change.

The glacial period appears to have been general, that

is, to have extended to both hemispheres, the tropics alone escaping its disastrous influence. The gravels and glacier-drifted boulders and rocks which testify to its existence, are found in Australia and South America, as well as in Asia, Europe, and North America. Geologists, who have studied the glacial period principally during the last few years, have simply recognised and described it; generally speaking, without attempting to explain its causes. The learned M. Babinet, of the French Institute, has, however, very recently attempted an explanation on grounds known and accepted by astronomy.

Fixed stars, it is well known, are suns, comparable in all respects to the sun which forms the centre of our planetary system. Now some stars have proved "variable" within our astronomical range of time; that is, they have shone with variable brilliancy at intervals of longer and shorter duration, or they have even disappeared totally for a time. Some well-known stars in ancient catalogues have disappeared entirely and have never returned; they are lost stars. Lastly, some stars have appeared and shone with great brilliancy for a short time, and have then disappeared for ever. Such was the *Pilgrim* star which appeared in 1572, shone as brilliantly as the planet Venus, and after a year disappeared. It is supposed that the variable stars are diminished in splendour or even obscured at times by

the contact of matter existing in space, to which the name of "cosmic clouds" has been given, and which is neither comet nor planet. If our sun is a variable star, exposed to the periodical contact of such cosmic clouds, which would intercept light and heat, the glacial period is explained, and its return at some time or other becomes possible, if not probable.

It has also been suggested by Colonel James of the Ordnance Survey that the changes of the earth's climate which have occurred in geological periods may be due to changes in the inclination of the earth's axis, brought about by alterations in the crust of the earth that gradually affect the centre of gravity.

These explanations are merely theoretical, and may or may not be true. The fact remains, that the earth has undergone, within the limit of geological investigations, various important changes of climate that have reacted on life, such as are exemplified in the Mentonian amphitheatre, and that these changes have not been limited to the warm tertiary and cold glacial periods. Mr. Page in his most interesting work on "The Past and Present Life of the Globe," p. 188, has shown that similar warm and cold cycles must have existed during the earlier periods of the earth's existence. He has thereby shown the existence of a law which has repeatedly changed the earth and its inhabitants, and

which it may be presumed is destined again to change it in the ordinary course of nature.

The water which falls on the Mentone mountains, in finding its way to the sea, has excavated deep ravines, which expose the structure of the tertiary rocks. It has thus formed numerous narrow valleys, by which access is obtained to the higher mountains, and to three or four small picturesque villages therein built. These ravines constitute, as we shall see, an important feature in the sanitary history of Mentone. Owing to the backbone of the district, as it were, being limestone, the water is everywhere very hard, and the springs considered the purest are loaded with lime. Treated with oxalic acid, the water gives a most abundant precipitate, even when taken from springs in the sandstone rocks. I have had to meet this difficulty by giving distilled water or rain water to some patients. In others the hardness of the water is evidently beneficial, as, for instance, in cases of chronic diarrhœa.

In the unstratified limestone rocks at the Pont St. Louis are many crevices and caverns, similar to those which so frequently occur in the harder limestone rocks in general. These fissures and caverns owe their existence to various causes. Formed under water, and during their upheaval and drying subjected to pressure and heat, the limestone rocks have a tendency to split and to contract, and thus to form crevices and cavities.

The presenee of these fissures and eaverns is often the evident result of the dissolving action of water on the soluble limestone rock, and of the infiltrations of subterranean springs or of rivers in days gone by. The formation of these caverns on a larger seale is illustrated in the limestone formations of Derbyshire, Carinthia, and Kentucky. The Mammoth Cave of Kentucky, the eaverns of Adelsberg in Carinthia, and the Devil's Cave in Derbyshire are cited amongst the wonders of the world.

On the shore at the eastern extremity of the inner bay, in the "red rocks," as they are ealled, are several good-sized caves, which contain in great abundance organic remains—the bones of large and small mammi-fers—imbedded in hard sand and calcareous matter. The organic remains thus imbedded, cover the floor to a depth of many feet, and are mixed with the flint weapons and utensils, and knives, which have excited so much attention during the last few years; testifying as they do to the existence of races of savage men in far back pre-Adamite times.

The existence of flint weapons among the bones found in the Mentone caverns was first discovered, I believe, in 1858, by M. Forel, a Swiss geologist. He published in 1860 a memoir,* in which he gives the

* "Notice sur les Instruments en Silex et les Ossements trouves dans les Cavernes à Menton." Moyes. 1860.

result of his researches, but I was not acquainted with it when I wrote the first edition of this work. M. Forel's investigations were principally made in the third and fourth caves, counting from Mentone. He found a great quantity of broken bones, shells, remains of crustaceæ, and pieces of charcoal. Along with these he discovered many fragments, splinters of flint, and also many arrow and lance heads, spear points, and triangular pieces of flint, evidently intended for knives. The bones belonged to stags, sheep, boars, horses, wolves, dogs, cats, rabbits, a large carnivora, and one to the *bos primigenius*, a large bull which belongs to the glacial period.

During last winter (1862) my friend Mr. Moggridge continued these researches in the second cavern, and among great masses of bones also found the flint instruments above enumerated, some of them in a very perfect state. Pieces of charcoal were likewise found mixed with them.

The existence of these bone caves at Mentone, along with the geological features of the district, draws attention to one of the most interesting and difficult geological questions of the day. These flint instruments were evidently made by men, and by men to whom the first dawn of human civilization was unknown, who were living as savages now live in Australia. They knew how to make fires, as the pieces of charcoal show.

They lived evidently in the caves, and destroyed the animals, the bones of which form its floor, by means of the flint weapons, feeding on their flesh. The question is, when did they live?

These bone caves have been found all over the world; and latterly, in many, as at Mentone, the bones of animals have been found mixed with flint instruments. That the latter have been made by the hand of man appears rationally undeniable, and the first conclusion was that these savage men must have lived in the early historic periods; for the Celts and early Gauls used flint and stone weapons and utensils.

A minute investigation of the facts, however, soon proved that such could not be the case. Firstly, these cave flint utensils are quite different to those used by the Celts and the early tribes of the old and new world. Secondly, they were found in caves mixed up with the bones of animals existing long before the present era, in geological epochs before, during, and after the glacial period.

Thus, in a cavern at Kirkdale, in Yorkshire, have been found the teeth of two or three hundred hyenas. In this, and in that of Brixham, in Devonshire, and in other similar caverns, have been also found, in abundance, the remains of other races either totally extinct, or extinct in these climates, such as the tiger, the bear, the mammoth, the tichorhine rhinoceros, the

hippopotamus, and the Irish elk. These are races that existed in the warm pliocene epoch—when the climate of Europe was sub-tropical; before the subsidence of continents and the formation of the glaciers that gave rise to the boulder and gravel drift above described, and seen so well at Roccabruna and Ventimiglia.

These races appear to have been gradually or suddenly destroyed, or driven south by the glacial change. I say suddenly, for in some parts of the world the change seems to have been very sudden. A mammoth, in the flesh, was dug out of the frozen shores of the Lena, in the north of Asia, some few years ago. Its actual flesh was eaten by dogs, after having been thus preserved probably for tens of thousands of years, and the skeleton and hair adorn the museum of St. Petersburg. The skeletons of Irish elks have been found in the same regions, buried in the frozen soil, erect, with their head thrown back, as if they had been suddenly overpowered, suffocated, by a snow-storm, and overwhelmed with mud and drift. The skeletons of mammoths are found in such quantities, preserved in the frozen soil of the north of Asia, that for centuries there has been a brisk trade in the ivory of which their tusks are formed.

If the silex weapons and utensils had only been found along with the bones of extinct animals in caves, doubts might have been raised as to their showing the trace of

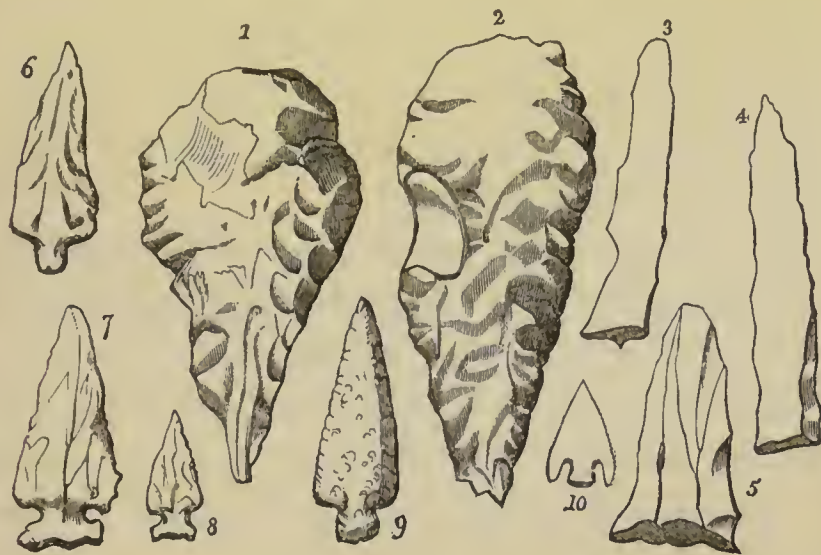
early races of men who lived when those animals lived, chased and destroyed them. They might have been left in those caves by men who inhabited them later; but there is other evidence.

They have been found together in the open, in beds of gravel and drift, the geological antiquity and date of which are denied by no geologist. Indeed, it is in such a bed at Amiens that the bones of extinct animals and flint weapons—the trace of man—were first discovered, by M. Boucher de Perthès, in the year 1840. His first statements were met with indifference, if not disbelief; but the most thorough and conscientious examination of the facts he announced, on the part of all the leading geologists of the day, both English and continental, has recently led to their acceptance and confirmation.

If men in a savage state existed before and during the glacial period along with races of animals long extinct, and if these were the men who made these kinds of flint weapons and utensils found in the Mentone caves, the presumption is that the traces of habitation which these caves present belong to this far distant period of the earth's history. The St. Louis limestone rocks, in which the caves exist, long covered by the sea, were probably raised from its bosom in time to witness all the changes that preceded and followed the glacial period, and the caves themselves may have been inhabited before the boulder drift of Rocca-bruna was formed.

In order to still further clear up the geological history of the Mentone cave deposits, it would be well for a museum to be formed at Mentone, and for the bones and flint utensils found in them by geological amateurs to be therein collected for future investigation. Otherwise their treasures will soon be rifled and thrown away by amateur enthusiasts, zealous in delving and digging, but not sufficiently learned in the knowledge of fossils to interpret what they find.

Future inquirers, in their research for flint weapons and utensils, will find the accompanying wood-cut valuable. It is reproduced from Mr. Page's work already quoted.



PRE-ADAMITE FLINT INSTRUMENTS.

1, 2, From Valley of Somme ; 3, 4, 5, England ; 6, 7, 8, Canada ;
9, 10, Scandinavia.

Having said so much on the presumed pre-adamite race of men, I must not leave the subject, new, perhaps, to many, without remarking, that these investigations have been accepted by many of the most eminent geological divines. It is felt, humbly, that what is true cannot be contrary to Scripture, although we may not be able *now* to see the link, the concordance, and that geology may continue its researches into the past history of the earth, and even of the human race, without fear or scruple. The concordance will most assuredly come. I would also add, that up to the present time no human bones have been found, that I am aware of, or at least, that there has been no well-authenticated instance. This is, at present, one of the difficulties of the question. Scientific men, however, are on the look-out, and expect from day to day to discover them. We may, therefore, join in the search at Mentone, and may find the sought-for solution to this mystery.

There is an amusing tradition among the inhabitants of Mentone, that many years ago a "mad Frenchman," who passed several winters at Mentone for the health of his wife, whom he eventually lost, spent his whole time in excavating these caverns. Some, indeed, go so far as to impute their entire formation to his insane efforts. No doubt the French stranger was merely an enthusiastic geologist, who had discovered the "bone drift," and worked at it with due energy. The traces

of his labours, or of those of others, are still found at the entrance of the larger cave. No clear idea of the natural sciences has penetrated as yet among the peasantry at Mentone. When botanizing, I have been often good-humouredly asked if I was looking for a salad, and told that the herbs I had collected were not good to eat, whereas such and such others were.

AGRICULTURAL GEOLOGY.

As I have stated, several of the lower or tertiary hills enclosed in the amphitheatre are formed of a loose sandstone. With this exception the soil may be said to be principally of limestone formation, with here and there aluminous clays. The agricultural geology of the district is consequently exceedingly interesting, offering much to observe in a very limited area. The clay strata, in their natural unworked state, appear, as elsewhere in Italy, very sterile. The sides of the deep ravines worn in them by mountain torrents present very little natural vegetation; as may be seen in the upper part of the Gorbio valley, and to the east of the mountain village of Castellare. Where, however, the fall is not precipitous, and especially, where terraces have been formed, and the soil has been worked and manured, the clay strata appear to become very productive. This is easily explained, as clays contain the

potash and other salts necessary for vegetation, and everywhere merely require cultivation and irrigation to become fertile.

The sandstone hills are more naturally fertile than the clays to their own peculiar vegetation above described, but do not offer the same resources to cultivation. The soil being principally silicious, and containing in very small proportion the salts and mineral constituents required for cereals and the vegetation of good land, it does not appear to become so easily fertile under cultivation. Still, with the help of terraces, irrigation, and manuring, it seems to respond to the wants of the evergreen olive, lemon, and orange-trees.

The hard unstratified limestone which constitutes the Mentonian basin, and of which the higher range of hills is mainly, if not entirely composed, by its decomposition forms a very fertile soil. Indeed, the gradual disintegration of this hard marble-like rock admirably illustrates the formation of soils in the early period of the earth's creation. Like limestones in general it contains, locked up in its all but adamantine structure, most of the mineral elements necessary for vegetation, including iron. The presence of iron is at once apparent from the red hue of the more perpendicular rocks. When a fracture occurs, the fracture is at first white, but from exposure to the air the iron passes to the state of the red peroxide, in which state it is well known to

greatly increase the fertility of soils. Thence the red hue of the rocks which bound the inner bay near the Pont St. Louis, and of the soil generally formed by the detritus of these rocks.

At the foot and on the sides of the limestone rocks are vast masses of stones and detritus that have fallen from the cliffs adjoining, broken off by the combined action of moisture, sun, and wind. These gradually crumble where they lie, yielding up their mineral constituents, and forming a suitable nidus for seeds sown either by the hand of Nature or by that of man. If the lemon or olive is planted, it grows at once vigorously and healthily. If vegetables and cereals are sown, they appear to be equally at home. The numerous terraces recently constructed on the side of the mountain, and at the foot of the cliffs near St. Louis, and the self-sown plants growing naturally in the same region, illustrate these facts. Thus, no doubt, was the soil of the habitable globe formed when its mountains first reared their heads above the waves.

From what precedes, it will be at once understood that the vegetation of the Mentonian amphitheatre, except that of the sand hills, is what may be termed a lime vegetation. In other words, the plants that thrive the best are principally those that flourish in a calcareous soil, in districts in which lime is a component part of the soil.

Thus ivy grows freely in the ravines, and on the walls, where there is moisture. The pellitory, essentially a lime plant, grows out of every wall and terracc. The wall-flower, the Virginian stock, and the pink and carnation grow and bloom most luxuriantly in the gardens, with little or no cultivation. They form large bushes in the winter, and are one huge mass of luxuriant blossom very early in spring. There is a small wild pink, a native, which grows out of crevices in the driest and most sun-burnt rocks. The *odoaster rubrum* or red valerian grows wild everywhere, throwing out thick succulent stems and large spikes of flower from mere crevices in the dry sun-burnt rock.

To these may be added as examples of lime-plants, the *arum arisarum*, the fumitory, the *cneorum tricoccum*, and the stonecrops. The fumitory is the commonest wild plant. It grows and flowers everywhere on the terraces throughout the winter. The *arum arisarum* is equally prolific and universal. Its dull purple flower covers the olive terraces, and attracts immediate attention after the autumn rains. I am told that the root is good food for pigs, but it is deep below the surface, consequently of rather difficult extraction, and appears not to be thought worth digging up. Moreover, pigs do not seem to be much esteemed, or their society cultivated in the Mentonian district.

The *cneorum tricoccum* is a rather elegant, small-

sized, bushy plant, with small, dark-green leaves, small yellow flowers, and trilobed seed, which is only found in the wildest, rockiest, and driest regions ; in such localities, for instance, as the rocks above the St. Louis Bridge, where it grows freely. It belongs to the Terebenthaceæ, chiefly a tropical order, and is in flower all winter. Along with it, because found in the same localities, must be named a very lovely, shrubby malvacea, the *Lavatera*, with delicate, pinky-white, "mallow" flowers. It blossoms very freely all winter in the above localities, and always attracts at once the attention of the stranger who leaves the shore and the terraces to climb the rocky heights.

The stonecrops (*crassulacæ*) are also very abundant on the walls, in the warmest and driest regions, generally growing out of their interstices. They flower in April.

Nor must I forget to mention, as adorning these rocky regions, the wild thyme, which grows freely and abundantly, flowering all winter. We can thus, throughout the winter, in December and January, murmur *sotto voce*,

"I know a *rock* whereon the wild thyme grows."

Another aromatic labiata found abundantly, is mint ; but its habitat is different. It must be looked for in the lanes and damp ravines, in moist localities.

The soil suits the vine, which flourishes in all such mountain regions with a southern exposure, on the Mediterranean shore. It is principally cultivated on terraces, at from 500 to 2000 feet above the shore level, and formerly very good wine was made in the district, some of which may still be had. For the last ten years, however, the oidium has reigned with the same savage intensity as at Madeira, and no wine whatever has been made. No doubt the evil might be remedied by procuring sound cuttings from the neighbourhood of Aix, where the disease has never appeared, and by sulphuring assiduously. But the Mentonians have not had hitherto sufficient energy or enterprise to adopt this course. The peasantry succumb to what they think is the will of God, and, I am told, think it even impious to strive against the disease. To me, their inaction is more the result of that apathy and disinclination to adopt new-fangled ways that has ever characterized the agricultural mind, in all countries.

During the winter the vines are without leaves, and being like old sticks, mere old ropes, when trailed, Italian fashion, from tree to tree, add nothing to the beauty of the scene. The peach and almond-trees are equally devoid of foliage, and therefore shine by their absence. The latter blossom in February, and then become ornamental. They are not very numerous.

Fruit-trees of all kinds seem to find the shore-level

too warm, and are principally cultivated at a much greater elevation, such as the vicinity of St. Agnes, above 2000 feet high. Here, vines, apple, pear, cherry, peach, and almond-trees abound, covering the terraces, and taking the place of the olive-tree. The winter frosts are severe, for I have repeatedly seen ice an inch thick at this elevation. This degree of winter cold seems, indeed, to suit their constitution better than the mild climate of the sea-shore region.

CHAPTER IV.

METEOROLOGY.

As is the case in the South, the rain generally falls in great quantities in a limited space of time, filling the torrents with enormous volumes of water, which carry great masses of stone from the mountains, and form wide beds as they approach the shore line. These watercourses are, at other times, as in Central and Southern Italy, mere rivers of stones, with a thin stream of water trickling through the middle.

On one night, Dec., 1859, $4\frac{1}{2}$ inches fell in ten hours. The greatest amount of rain that was known to have fallen in twenty-four hours at Greenwich in five years was 2·63 in.—(Drew). The total rain-fall during the winter of 1859-60 at Mentone was 23·68 in., from October 9th to April 21st; viz., October, 8·02 in.; November, 2·21 in.; December, 6·96 in.; January, 3·24 in.; February, ·18 in.; March, 1·26 in.; April, 1·81 in. These data were given me by a friend, Mr. Smith, of Rome, who kept an accurate register. According to my observations, it rained in that winter, in November five days, in December five, in January four, in February

one, in March six, and in April, up to the 23rd, eight days ; in all, twenty-nine days, from November 3rd until April 23rd. In October, I was told, it rained nearly every day.

I constantly saw it raining on the hills, or a few miles out at sea, when it was quite clear and fine at Mentone. In the former case, the wind was generally a southern wind, and as it ascended the mountain it evidently met with colder strata of air which precipitated its moisture. I have repeatedly sat on the mountain-side and watched a current of warm air rise from the sea at a distance, form at first a vapour, and then a white cloud, gradually ascending the mountain. It is singular to see the small cloud thus spring, as it were, from the waves near the shore, and gradually expand and enlarge as it creeps up the mountain-side. I was, indeed, forcibly reminded of the fisherman in the Arabian tale, who opens a casket on the seashore, from which the geni issues in the form of a thin vapour, which rapidly becomes a cloud covering the horizon.

A more reverent and more striking illustration of this phenomenon is to be found in the history of the prophet Elijah, in sacred writ (1 Kings, chap. xviii.), "And he said to her servant, Go up now, look toward the sea . . . and it came to pass at the seventh time, that he said, Behold, there ariseth a little cloud out of

the sea, like a man's hand. And he said, Go up, say unto Ahab, Prepare thy chariot, and get thee down, that the rain stop thee not. And it came to pass in the meanwhile, that the heaven was black with clouds, and wind, and there was a great rain."

The rain in these instances was often confined to the upper hills, and increased the volume of torrents and rivulets, although it was quite fine on the shore.

When, on the contrary, it rained a few miles out at sea, whilst we had fine dry weather at Mentone, the wind came generally from the contrary direction, from the North. The cold north wind passing over our heads, impinged upon the sea some distance from the shore, meeting warmer atmospheric strata. Dark banks of clouds would thus form, and rain would fall several miles from the coast. In either case the coast ledge enjoyed a happy immunity.

The average fall of rain at Nice is 25 inches. I presume that the annual fall at Mentone is as great, or indeed greater, from its being hemmed in by mountains on nearly all sides but one. According to Roubandi, the author of a valuable work on the climate of Nice, the average number of rainy days at Nice is sixty. M. de Brea, a native and resident of Mentone, and a gentleman of high scientific attainments, has recently published a meteorological table, founded on ten years' observation, from 1851 to 1861. According to his

observation, the average number of days or nights during which it rained little or much at Mentone is 80, or 20 more than at Nice. We may presume, therefore, that the fall of rain is also greater, although the consequence is not necessary. At Greenwich, the average rainfall is only 25 inches, yet the number of rainy days is 155. At Torquay, the average number of rainy days is also 155. At Pau, the average rainfall is 43 inches; rainy days, 119. At Malaga, the number of rainy days is only 40 (Francis). At Madaira, the rainfall is variable, the average about 30 inches, the rainy days 88 (Dr. White).

The amount of rain that falls does not so much characterize the climate of a locality as the manner in which it falls. At Mentone, as at Nice, and along the entire Riviera, thoroughly cloudy days and days of incessant rain are rare. They do, however, occur occasionally in the winter. The sky will be obscured, so that the sun is not seen, and rain will fall for several days and nights. But this does not usually take place more than two, three, or four times in the course of the winter. Many inches of rain fall on these occasions, thoroughly soaking the ground. Then, after two or three days, the clouds disperse, the sun peers forth, and again earcers through a clear blue sky, like a blazing fire. In a few hours, the ground becomes dry, and many days of uninterrupted sunshine follow, during

which out-door life goes on as during a fine, rainless October with us.

During the summer but little or no rain falls. In some years the drought lasts without cessation for six or eight months, from April or May to October or November. Thence the absolute necessity of tanks for the irrigation of the lemon and orange-trees, which, as we have seen, cannot thrive and bear fruit without constant irrigation. In the autumn there is generally a kind of rainy season, but its periodicity appears to be very irregular. During my first winter it was in October, when it rained for nearly three weeks, with but little cessation. During the second the rain fell principally in the latter half of November and the early part of December. During the third winter, 1861-2, we had a few days rain early in November, and then all but uninterrupted fine and dry weather until the 20th of January, when rain fell heavily for several days. On this occasion there were great complaints, and the country suffered from drought. It was evidently an exceptional state of things.

The entire Riviera and the southern coast of France are evidently situated on the margin of what Maury calls the "rainless track," the highest expression of which is the Desert of Sahara in Africa. He attributes the existence of this region, in which but little rain falls, to the Andes or Cordilleras of South America.

The winds from the south-west, which prevail both in the Pacific and the Atlantic, and which are the natural antagonists of the north-east trades, after sweeping the wide surface of the Pacific, and becoming perfectly saturated with moisture, meet the huge mountain barrier of the Andes. They have to ascend its western sides to an enormous elevation, varying from fourteen to twenty thousand feet, before they can pass over to its eastern slopes, and they thus have to encounter a very cold atmosphere. The extreme coldness of these upper regions of the Andes leads to the precipitation of the moisture which the winds contain—squeezes it out of them. Thence the origin of the immense rivers which descend from the eastern slopes of these mountains, such as the Amazon, the Orinoco, two of the largest rivers in the world.

The moist south-westerly Pacific winds, after crossing the Andes, and having thus precipitated their moisture, become dry winds. It is as such that they cross the South American continent, the Brazils, &c., to reach the Atlantic. This latter ocean they must and do cross as an *upper* south-west current, for the north-easterly trades occupy the surface of the Atlantic between the Cape Verd Islands and the tropic. Above the northern limit of the trades they again become *surface* winds, and constitute the south-westerly winds of North Africa and of Europe. Reaching the north-

western coast of Africa still as dry winds, for, as we have seen, they have passed the Atlantic as a dry, upper current to the north-eastern trades; they have no moisture to give to a level surface, and thence the desert of Sahara. The Atlas and the mountains of South Spain, which they then have to cross, squeeze some moisture out of them, and thus form the small rivers of Algeria and of Andalusia; but when they reach the Mediterranean and its shores, they have still less to give until they have pumped it out of that inland sea. These same south-westerly winds are moist winds on the north-western coast of Spain and on the western coasts of France, because they have for some time been surface winds on the Atlantic, ever since they descended to the surface at the northern limit of the north-east trades, and have thus acquired moisture.

The fact of the Mediterranean south-westerly wind being a dry South American south-west wind, which has passed over the Atlantic as an upper current to the north-east trades, is proved by a very singular natural fact. Occasionally, from time immemorial, a kind of red dust settles on the decks and sails of vessels in the Mediterranean and on its islands and shores. Submitted recently to microscopic examination, it has been discovered that this dust, which was supposed to come from the African deserts, is composed of the microscopic shells of infusoria which inhabit the

Brazils, the dried beds of the tributaries of the Amazon and Orinoco. The furious south-westerly dry wind of these regions, evidently raises them up as impalpable dust, wafts them across the Atlantic as an upper current to the north-east trade, and finally deposits them on the Mediterranean Sea, on Sicily, on Malta, and on the Greeian Archipelago. Truly this discovery is a wonderful evidence of the manner in which the different branches of natural science corroborate and support one another, and a marvellous proof of the genius of Lieut. Maury, who has been allowed to discover "which way the wind goeth and whence it cometh."

'During the three winters that I have passed at Mentone, living in the inner or eastern bay, I have never seen a fog, day or night, morning or evening. Generally speaking, the sky has been clear, and the sun shining in the heavens like a globe of fire. During the first winter, there were seldom any clouds in the sky, except during the rainy days above described. In the second, the wind was oftener in a southern quarter, and days when the sky was partially covered, without rain, were more numerous. But even on these days the sun was always seen and its power felt. So powerful are its rays, generally, that even in December or January, it is disagreeable to walk without a lined parasol, as in the East generally. The use of these parasols is not confined to the ladies, few gentlemen braving the

sun without. They are a positive want, and those who object to them at first are sure to give in before long.

Sunshine is quite different in England and in the south of Europe. In our climate the air, even in summer, is filled with watery vapour, which gives a whitish hue to the sky in July or August, and mitigates the effects of the sun's rays. In the South and at Mentone it is quite different. In fine weather, winter or summer, the sky is of a hard blue, and objects at a distance of many miles are seen clearly and distinctly, without any of that haze which forms so peculiar a feature in an English landscape. Immediately behind the house where I resided, rises a mountain, the Bereeau, the two peaks of which are 3850 feet high. They were generally, throughout the winter, perfectly free from clouds, and seemed so near that nothing but absolute barometrical measurement convinced me and others of the real height. I should have thought it about 2500 feet at the utmost.

Owing to the great power of the sun, the freedom from fog, the slight amount of rain, and the dry, rocky character of the soil, the air is usually very dry. So much is this the case, that wet or damp linen dries in the open air, out of the sun, in a very short time, at any period of the winter, except when it rains, or when the sky is obscured. In January of the year 1861, I sat out of doors reading for two hours every afternoon, from the 3rd of January until the end of the month.

I merely chose a spot sheltered from the wind, at the foot of an olive-tree, and exposed to the sun, from which I was, however, always obliged to screen myself by the lined parasol. Without this precaution the position would have been quite untenable. A thermometer in the shade near me marked 59° to 62° . At my feet, and around me, were always many insects, attracted by masses of wild thyme in full bloom.

Whilst speaking of insects, I must mention that one of the charms of the climate is, that notwithstanding the warmth and sunshine of the days there is a complete immunity from all venomous insects, gnats, or mosquitoes during the winter, after the first cold night in December. This is, no doubt, owing to the general coolness of the night temperature. Previous to that time in the autumn the mosquitoes are very troublesome. This is to be partly attributed to the beds being generally furnished with curtains, which are no protection whatever. They are open in front, and too heavy for it not to be insufferably close when brought together. It is quite worth an invalid's while to have regular net mosquito-curtains made on arrival. The mosquitoes do not reappear until summer.

According to M. de Brea's statistics, omitting the fractions, the annual number of fine days in which the sun shines without clouds is 214; the number of days in which the sun shines with clouds is 45; and the number

of days in which the sun is not seen, the sky being completely obscured, without rain, is 24. To which we may add days of rain, 80, many in part sunshiny.

And yet it was decidedly winter at Mentone. The nights were chilly, the thermometer generally falling to between 40° and 48° in fine weather, and in bad weather sometimes below 40° , during four months—December, January, February, and March. In the daytime it was generally cool in the shade and when the sun was obscured by clouds. The ordinary “shade maximum” varied from 50° to 56° when the sun shone, and was lower still when it did not. It always became cold as soon as the sun went down. The heat was evidently sun heat. In a south room, whenever the sun was on the room, the window could be left wide open; and, without a fire, the thermometer generally remained at 62° , or thereabouts. As soon as the sun disappeared, however, the window had to be shut, and a wood fire lighted. In midday, also, the north rooms on the same floor during these months were generally four, six, or eight degrees colder than the south. Again, immediately after the sun disappeared behind the mountains, there was generally a difference of six or eight degrees in the temperature of the atmosphere; and whenever the sun was permanently obscured by clouds it became chilly and cold, and the complaints against the climate were loud and numerous.

These complaints seem partly to have their origin in the extreme depression which appears to attack the entire community, but more especially the invalids, when the weather is thus cloudy and wet, and the sun is obscured. I have both observed this depression and painfully experienced it myself. In such weather most of us are indescribably wretched and miserable. Then, indeed, we feel vividly that we are poor invalids, exiles from home, stranded on the shores of the stream of life. But with the return of bright sunshiny weather, all these gloomy thoughts disappear. Once more we are gay and cheerful: inclined, indeed, to look on our ill-health as in some respects a positive advantage. Is it not the cause of our being able to avoid the dreary winter of our northern cloud-girt island? Is it not to our break down that we owe the temporary freedom from the cares and duties of real life—the real school-boy's holyday we enjoy?

I used to think that the cause of this general buoyancy of spirits experienced by the northern winter residents, whether invalids or not, in fine weather, and of the remarkable depression felt in bad weather, was merely, on the one hand, the stimulating sunshine, and, on the other, its absence. My friend Dr. Copeland, to whom I happened to mention the fact, has given me another explanation, a most philosophical one, which I am also inclined to admit, especially in this climate.

Moist air is a good conductor of electricity ; dry air a bad one. The human body receives electricity constantly from the earth with which it is in contact, and probably developes it through the organic processes. In dry weather this electricity is retained in a great measure, and the body becoming loaded with it, the nervous system is stimulated, and buoyancy and cheerfulness of mind follow. In damp weather, on the contrary, the moisture of the atmosphere acts as a conductor, and constantly carries away the electricity from the body. Thence it is at a minimum, and mental depression follows. According to this view the depression and nervous excitability experienced by delicate susceptible persons in summer, when the sky covered with dense clouds and the moist air portend storms, when "there is thunder in the air," is not to be attributed to the generally-received cause. Instead of receiving too much electricity, as is commonly supposed, the body is losing too rapidly its own electricity. Hence the depression, according to this charming theory.

The vegetation showed the influence of a powerful sun warming a chilly atmosphere. The deciduous trees lost their leaves in December, as soon as the nights became cold, and did not regain them until April, when they were becoming warmer. The green forest-clad appearance of the hills and valleys in midwinter was owing entirely to the evergreen, olive, orange, and

lemon-trees. The few deciduous trees were mere dry sticks until April. On the other hand, in sheltered situations exposed to the south, the heat of the sun during the day so warmed the soil, that it had not time to cool at night, and such situations became regular forcing-beds, producing, as I have stated, violets in December, anemones in January, and all our spring flowers early in February. Where the sun did not penetrate, on the other hand, the ground-vegetation remained torpid, like the deciduous trees, till March. As, however, the sun-exposed localities were very numerous on the sheltered lower hills and in protected valleys away from the sea, the ground vegetation early became very luxuriant and abundant, offering great resources to the botanist and florist. Indeed, in the warmer valleys the only winter was the thoroughly rainy days.

From what precedes, it will be perceived that the characteristics of the climate of Mentone, as evidenced during the three last winters—unusually severe ones—are the following: the absence of frost; the absence of fogs; the paucity of rainy days; the clearness of the sky; the heat and brilliancy of the sun when it does not rain; a rather cool or chilly night temperature; a bracing coolness of the atmosphere throughout the winter out of the sun's rays. When, on the contrary, the sun is obscured by clouds, and rain falls, there is as

miserable and chilly a state of things as in a drizzling November day in England. As, however, rain only falls on a small number of days, and then often not during the whole day, and as the other days are uniformly bright, clear, and sunshiny, five days out of six, throughout the winter, exercise in the open air can be prudently taken, from ten until four or five, with both satisfaction and benefit.

Notwithstanding the complete protection from the north, and north-west or mistral, the wind is often rather high. It generally seems to come from the south-east or south-west, the open quarters, probably owing in part to the land-locked character of the district; but even when it is present, the mountain valleys and the more internal hills are quite sheltered and protected. There certainly is anything but the atmospheric stagnation which has been mentioned as peculiar to Mentone. The second or eastern bay is decidedly better protected from wind, and appears to be a couple of degrees warmer also, than the western, owing to the mountain rising immediately behind the houses which line the shore.

According to Admiral Smyth, in his very interesting work on "The Mediterranean"* (p. 233), the most prevalent winds in that sea are those that blow from west

* "The Mediterranean: a Memoir, Physical, Historical, and Nautical." By Rear-Admiral W. H. Smyth. Parker. 1854.

round northwards to north-east, during two-thirds of the year, from May to February. During the months of February, March, and April, on the contrary, the south-east and south-west winds prevail. My experience of the Mentonian shore during three winters completely agrees with this statement. In November, December, and January the north-east, north-west, and north winds have predominated. In the three following months it has been the southern winds that have principally prevailed. This fact is the key to the local climate. During the three cold winter months, November, December, and January, the high mountain barrier protects the amphitheatre from the prevalent northern winds. During the three spring months the prevalent southern winds, to which it is exposed, merely bring genial warmth and occasional fostering showers.

The southerly winds to which Mentone is thus exposed are, however, of a much less unpleasant character than the north, and especially than the odious mistral, which it escapes. Even the south-east, or sirocco, the plague of southern Italy, all but loses its languor-creating, pernicious character by the time it reaches the head of the Gulf of Genoa. It has passed over the heights of the Apennines and the high granitic range of Corsica, some of the summits of which are clothed with eternal snow. It has thus become much cooler than in the south or centre of Italy.

In addition to these winds, I must mention, that whenever it is very fine, and the sun shines with force on the Mentonian amphitheatre, there is a very decided sea-breeze during the middle of the day, as in tropical countries. The air becoming heated and rarefied in the mountain basin, rises, and cooler air from the sea rushes in to supply its place. In winter, this sea-breeze reigns from about twelve to three. In summer it begins much earlier—at eight. Thus the sea shore of Mentone is decidedly windy, especially in early spring, but the wind is usually gentle and soft, and can be completely avoided by leaving the shore and gaining the numerous valleys. We must recollect also that wind is a health-giving agent, a purifier of the earth, and that a place where there is no wind would soon become pestilential in a southern climate. It is only objectionable for the very ill.

Between the subsiding of the night land-breeze and the rising of the day sea-breeze, and again between the subsiding of the day-breeze and the rising of the night land-breeze, in fine, bright sunshiny weather, there is a period of repose, a lull, during which the air is calm. The present Italian mariners call this period of calm *bonaccia*, as being unaccompanied by danger: their more sturdy Roman predecessors designated it *malaccia*, from its being a cause of detention (Admiral Smyth). This period lasts, in winter, from about eight to twelve

a.m., and from three to five or six p.m., according to the length of the day and the amount of sunshine. This is the time for great invalids to walk on the shore. Those who are doing well, as also the strong and healthy, can receive no harm whatever from a good blow, if well clothed, and not heated by violent exercise.

The cool land-breeze from the mountains is generally very gentle, especially in winter. Occasionally, however, owing to sudden change of temperature between land and sea, these winds descend suddenly and with great impetuosity, as in all parts of the Mediterranean skirted with high mountains. Thence the general use of "lateen or triangular sails, attached to yards that can instantly be let down by the run, for the xebecs, feluccas, and other craft which coast the shores within their influence."

It is at night that the land-breeze descends from the high mountain ranges. It is quite perceptible even in winter as soon as the sun has set, especially in the western bay. The greater warmth of the eastern bay is, no doubt, in a great measure due to the secondary range of hills, rising immediately from the sea, and cutting off, as it were, this cold air current. Wherever there is a gully, ravine, or torrent bed, the temperature is always two or three degrees lower at night than elsewhere, owing to its forming a kind of

funnel down which these colder mountain currents descend to the sea.

In summer the cold mountain currents at night powerfully contribute to diminish heat; and, combined with the day sea-breeze, produce a much cooler and more equable temperature than is found inland in the same latitudes.

The climate of Mentone is a favourable specimen of what botanists call the warmer temperate zone. Plants live which frost kills; many annuals in a colder region become perennials; and many forms of vegetation new to the more northern flora make their appearance. It is the Mediterranean climate, but that of the more favoured Mediterranean regions. In Italy, for instance, the most protected southern parts must be reached to find the same immunity from frost. Mentone, also, is a little warmer, and more protected from wind than its neighbour, Nice; and much more so than Cannes, although the general features of the climate must be the same, for they are only a few miles apart. It is the question of fruit walls in the same orchard, one a little more protected than the others, but all being turned towards the South. At Nice, however, there are sheltered situations, such as the Cimiez and the Carabacel, in which the protection is greater than in the town itself, and which thus assimilate to Mentone.

It is well to recollect that in such a climate, in the

warmer temperate zone, winter is not by any means avoided. The descriptions of the winter climate of Nice, Cannes, Hyères, and Italy in general, contained in most books of travel, works on climate, guide-books, &c., are mere poetical delusions. The perpetual spring, the eternal summer, the warm southern balmy atmosphere, described to the reader in such glowing terms, only exist in the imagination of the writers. Although there is so much sunshine, so much fine weather, such immunity from fog and drizzling rain, it is still winter. Wind, rain, a chilly atmosphere, and occasional cold weather have to be encountered, and it is as well that the invalid traveller should be prepared to encounter them. Otherwise, anticipating an Eldorado, balmy zephyrs, perpetual sunshine, and an ever-smiling nature, he is disappointed. I believe that continuous warm weather in winter and the complete absence of any cold days, are not to be met with in the temperate zone,—only in tropical or sub-tropical regions. If they are considered requisite, therefore, the tropics, or at least Madeira, should be selected.

The existence of orange and lemon-trees, of geraniums, heliotropes, verbenas, and roses, flowering throughout the winter, does not necessarily imply the absence of cold weather, merely the absence of absolute frost. This is well known to all who are familiar with the management of conservatories and of winter flower gardens in

England. Once the flowers, gathered from every clime, which make an English conservatory such a scene of glory in winter, are fully in blossom, and have been brought in from the foreign-houses, all gardeners know that a rather low temperature is beneficial, and prolongs the bloom and beauty of their floral favourites. The Chinese primulas, the heaths, the camælis, the azaleas, the correas, the chrysanthemums, the bulbous plants, &c., continue to expand and thrive at a night temperature of from 38° to 44° . It is the frost they fear.

A few miles from Mentone, at Bordighera, groves of palm-trees grow in great luxuriance, and are looked upon by all travellers as evidences of an Eastern climate; as are those that grow on the "Place" at Hyères, and in private gardens at Nice. Such, however, is not the case. Palms will grow as out-door trees at any part of the Riviera, and would be generally cultivated, were it not that their cultivation is unprofitable everywhere, except at Bordighera, which has the monopoly of supplying Rome with palms on Palm Sunday. But they either do not produce fruit, or their fruit is not fit to eat. To ripen the fruit of the date-palm the sultry heat of the deserts of Egypt or of the Sahara is required. This tree may be compared, when growing in southern Europe, to the chestnut-tree in the north of England. As a tree, the latter grows

with us in great luxuriance, but its fruit is all but worthless. The centre and the south of Europe alone have sufficient summer warmth to allow the fruit to reach perfection. The presence of magnificent chestnut-trees in our climate does not, therefore, indicate that it is a warm one. I have, indeed, seen such trees in the Highlands of Scotland.

The proximity of the sea exercises a considerable influence over the climate of Mentone, as the temperature of the Mediterranean is never very low. When the weather is cold, and especially when the sun is obscured, the sea is a reservoir of heat, and perceptibly warms the air; for it is then warmer on the sea level than on the hills. When, on the contrary, as is usually the case, the sun shines, the evaporation which constantly takes place cools the air at the sea level, and it becomes perceptibly warmer as the hills are ascended. There are sheltered sunny nooks in the vicinity of Castellare, a mountain village 1500 feet above the sea level, where, owing, no doubt, to the concentration and reverberation of the sun's rays, the climate is exceptionally mild, and where violets and anemones appear at least ten days before they are found elsewhere.

The summer climate of Mentone is said to be cool and pleasant. This is owing, as we have seen, to the sea-breeze which sets in regularly, as I have stated in

the morning, and blows the greater part of the day, and to the cool land-breeze which descends at night from the higher mountains. As is shown by the tables at the end, the heat seldom or never rises above 81° Fah., a temperature which is reached and passed every year both in London and Paris. This statement must, however, be taken with some little allowance. In the tropics, on the sea-coast, there is this sea-breeze daily, which makes the warm weather bearable, even agreeable to some; but still it does not prevent the temperature being high. Warmth, when the air is stagnant and loaded with moisture, is very difficult to bear, because the insensible perspiration collects on the skin, and is not carried off. This renders warm weather so unpleasant in England, where the air is generally more or less saturated with moisture. When, on the contrary, there is a light breeze fanning the body, and the air is dry, as on this coast, the perspiration is constantly carried away, and the body cooled by its vaporization. The trying feature of the summer heat in the Riviera is, that the nights are not much cooler than the days, so that rather a high temperature has to be borne constantly, night and day, for several months.

Such being the case,—although persons in health may find it an agreeable summer residence,—I do not advise invalids to remain at Mentone during the summer season. If they do not wish to return to England,

the best summer climate in Europe for health, they had better seek a refuge from the heat in some of the high mountain sanatoria to which the medical men of Switzerland send their patients. I may mention, as easily accessible, the Grand Chartreuse, near Coni, and further away, the Grand Cormoyeur, a well-sheltered and picturesque mountain valley, with sulphur springs, near Aosta, on the south side of the Mount St. Bernard. I have sought for such a refuge in Corsica, which is much more accessible, but without any success. The cool summer climate exists there, but without the accommodation which would make it useful or available, as will be explained hereafter.

In Switzerland there are many retreats of this kind, at variable grades of elevation. Amongst the pleasantest and best, according to my friend Dr. Bezancanet, of Aigle, are the baths of Morgins, in the Valais, above 4000 feet high, a charming mountain valley, well known for its strong chalybeate spring; Sepey or Ormonds, about seven leagues from Vevay, 3300 feet high; La Rossinière, a pretty mountain village, with a good hotel; Aigle, Bex, and Clarens. The three latter are only 800 feet above the level of the Lake of Geneva, but the lake itself is 1200 feet above the sea level so that the elevation is still considerable. In early summer and in the autumn they are better calculated for the invalid than the higher elevations, which are

only suited for invalids during the great summer heats—from the middle of July to the end of August and the middle of September. At all these places there are comfortable *pensions* at very reasonable rates.

In cases of phthisis more especially, extreme heat should be avoided during the summer, as calculated to accelerate the progress of the disease. The patient should therefore be kept in a temperature below 70° Fah. This, in Continental Europe, can only be done by leaving the plains for the mountains, and attaining thereon a considerable elevation—at least three or four thousand feet.

CHAPTER V.

THE MEDITERRANEAN.

BIRDS—THE ST. LOUIS ROCKS.

THE ordinary notion of the Mediterranean is that of a blue and tranquil ocean lake. At Mentone, during the winter, this poetical view of the great inland sea is often strangely falsified. Sometimes for weeks together it is constantly angry, quite realizing the experience of “pious Æneas” in days gone by. For then it is a troubled and perfidious sea, ever breaking in angry billows on the shingly beach.

To those who are familiarized with the varying forms of our old ocean, ever advancing, ever retreating, this seething, tideless sea, which day and night beats the shore with impotent rage, never advancing, never retreating, is at first tedious in the extreme. Gradually, however, the eye, the ear, the mind, become accustomed to its monotonous anger, and open to its real magnificence. Then, indeed, it is a glorious privilege to live, as nearly all do at Mentone, in front of the boundless liquid Mediterranean plain; at one time heaving restlessly, at another, in a calmer mood, covered with myriads of facets on which the sparkling sunshine

danees and glitters. The daily rising of the sun, also, in the east, out of the waters, colouring the skies and the waves with hues which surpass those of the rainbow, is a magnificent sight, that never palls.

To a reflective mind, the Mediterranean is the most interesting of all seas, of all waters. Its shores are hallowed by association with the entire history of human civilization. It may be said to have been the cradle of the human race and intellect. When the rest of the world was a blank, a mystery, every region of its circumference was known and inhabited by the nations whom we may consider the fathers of history. The Jews, the Phœnicians, the Egyptians, the Greeks, the Carthaginians, the Romans, all lived on its shores, navigated its waters, and developed their life as nations within sight of it. In early half fabulous days, it carried the fair Helen from her Greeian home to Troy, and then brought her ill-used husband, and the kings and chieftains of Greece, to the walls of her doomed asylum. Later it witnessed the rise and progress of Christianity, was the scene of the voyages, the shipwrecks, and the trials of the apostles. It carried the crusaders on its bosom to fight for the cross, and bore back the remnant of their wondrous armaments to their northern homes. In modern times, too, the Mediterranean has been the road to the East, the battle-field of the world, the connecting link of Europe, Asia, and Africa.

When the sea is breaking furiously on the beach, as it does during the greater part of the winter, there is but little marine life visible. The sea level being ever the same, owing to the absence of tides, there are no exploring walks on the sands at low tide, as on our coasts, no searching after zoophytes and fuci. On calm days, however, a walk to the extreme end of the Cap Martin introduces the amateur naturalist to pools lying between jagged rocks, where there is much to be observed. There are also other points along the eastern coast where similar pools may be found containing marine treasures; only to be examined, however, on days of perfect calm.

The Mediterranean is a deep sea, and its depth is very great on this coast near the shore. According to Lyell, Saussure found a depth of two thousand feet a few yards from the land at Nice, and from Toulon to Genoa the sea is everywhere very deep quite near the shore. This is always the case in the Mediterranean where mountains terminate abruptly in or near the sea, as they do along the Riviera. The abysses of the sea are probably at least as deep as the mountains in their vicinity are high; and as at Mentone the mountain range reaches the sea line, there are, no doubt, alpine valleys many thousand feet deep within a very short distance of the shore—a grand idea!

Thus is explained the absence of deltas at the mouths

of the large torrents which descend from the mountains and fall into the sea in the Mentonian amphitheatre. For countless ages these torrents have been rolling, during the winter rains, great masses of boulders into the sea, and yet no impression has been produced on the outline of the two bays, which remains perfect. No doubt these boulders, which form in places a shingly beach, are soon rolled into these all but unfathomable depths, just as stones rolled down a housetop would fall into the space below. The same remark applies to the Paillon torrent at Nice. Thus, at the bottom of these marine valleys are now forming, no doubt, beds of conglomerate, similar in character to the one on which the village of Roeeabruna is perched.

The Mediterranean is a warm sea. At all times of the year it is five or six degrees warmer than the Atlantic Ocean under the same latitude; and in winter it is never cooled down to the same extent that the latter is in northern and even temperate regions. In the open oceans there are, deep below the surface, cold currents from the North and South Pole, which have been revealed by the deep-sea soundings of Lieut. Maury and others. Thus, in the Atlantic Ocean,—at the bottom of the Gulf Stream, a temperature of only 35° Fah. has been found, whilst the surface was above 80°. The Mediterranean, a land-enclosed sea, is not accessible to these Polar currents, which is one of the causes, no

doubt, of its exceptional warmth. Even in winter, I have never found it lower than 54° on the Mentone coast in deep water.

There seems to have been little, if any change, in the temperature of the Mediterranean and of its shores, within the memory of man. The same vegetation exists and flourishes on the latter that existed and flourished when the earliest records were penned, those of Sacred Writ and of Homer. The geological features do not either appear to have changed within that period, except as regards slight elevations and depressions of some coasts. Thus, the climate has probably been the same during the historic period. It has been characterized in former historic days, as now, by sunshine, by little rain, and by an atmosphere which only contains one-half of the moisture of the English atmosphere.

The paucity of rain, and the small number of large rivers that empty into the Mediterranean are such, that the supply of fresh water to the Mediterranean is much below the amount taken up by evaporation. To meet this deficiency a wide stream or current of seawater, many hundred feet deep, sets in through the Straits of Gibraltar from the Atlantic. This inward current was formerly supposed to be owing to a difference of level, the Mediterranean, in this hypothesis, being lower than the Atlantic. The researches of

Admiral Smyth, and of other observers, have proved this view to be fallacious. The Atlantic, the Mediterranean, the Black Sea, the Adriatic, and even the Red Sea, have all the same level.

Admiral Smyth doubts the existence of a deep counter-current from the Mediterranean to the Atlantic, through the Straits of Gibraltar, but Lieut. Maury considers it proved. Were such a counter-current not to exist, he says, the waters of the Mediterranean would not only be slightly saltier than those of the Atlantic, as they actually are, but would become intensely saltier, like those of the Dead Sea, which has no outlet, and would deposit salt at the bottom from over-saturation. This is not the case, which proves, he states, that there *must* be a deep counter and outer current of water, of a denser gravity—from increased saturation with salt—than the upper and inner Atlantic current. This he shows to be actually the case from other data. Thus is the equilibrium established between the Mediterranean and the outer ocean, and thus is the saltiness of the Mediterranean kept within very nearly the ordinary limits, notwithstanding the deficient supply of fresh water from river and rain sources.

This exceptional warmth of the Mediterranean exercises, as we have seen, an influence on the climate, which it modifies favourably. It also exercises

a remarkable influence on the finny tribes that inhabit it.

As Licut. Maury states, the cold oceans and seas are those in which fish, especially good edible fish, thrive the most, and are the most prolific. The cod, the mackerel, the herring, the sole, the salmon, all belong to northern latitudes. Fish are abundant and good on the north coast of America, east and west, and on the north coast of Europe. The shoals of herrings, mackerel, pilchards, cod, that visit our seas every year, all come from the north, and return to it. Between the Gulf Stream, as it ascends the Atlantic from the Gulf of Florida, along the coast of the United States, there is a band or wedge of water, descending from the north, which is many degrees colder than the ascending waters of the Gulf Stream itself. This band of cold water is full of good edible fish, whereas the warmer waters of the Gulf Stream contain comparatively few fish, and those not good. In the tropics and in warmer seas also, the fish are neither so good nor so numerous, although more brilliant and fantastic in colour and shape. The Mediterranean is no exception to this rule, as I can testify from personal experience. The fish it contains is in general neither good nor abundant, which accounts for the Roman Catholic inhabitants of its shores consuming so large a quantity of the product of the herring and cold fisheries of Northern Europe.

At Mentone the very great depth of the sea at a short distance from the shore is no doubt an additional drawback, as very deep waters are neither favourable to the breeding of fish, nor good fishing-grounds. Our best fishing grounds are all shoal-water banks, as for instance the Dogger Bank, that of Newfoundland, &c.

On a fine day, when the sea is calm, the Mentone fishermen are on the alert betimes, and the bay is studded with boats. A very close-meshed bag net is thrown out and buoyed, and then dragged in shore by long ropes, with great excitement on the part of those engaged. There are often ten or twelve men, women, and children to each net. When at last, however, it is drawn in, and its contents are scattered on the beach, these efforts recal the fable of the mountain in labour. There is seldom anything in the bag but a few pounds' weight of a minute transparent whitebait-kind of fish, a few sardines and small red mullets, some diminutive sword-fish fry, and two or three crabs the size of a five-shilling piece, that have not been able to get out of the way.

These small-meshed nets must be very destructive to young fish; and as they are everywhere used on the Mediterranean coast, they must tend to render it even more unproductive than nature intended it to be.

The French Government, which has paid great attention, during the last few years, to piseiculture or the

replenishment both of its salt and fresh waters with fish, has become alive to this fact. A commission has recently been appointed to inquire into the condition of the fisheries on the northern shore of the Mediterranean, with a view to their improvement; and the probable result of its labours will be a prohibition of the use of these small-meshed nets—a very necessary step. They unquestionably tend to destroy the fisheries wherever used, by annihilating the small fry on the shallows. Unless some such measure is adopted, fish must all but disappear from the Mentonian shores, stimulated as their destruction is by the presence of wealthy fish-eating strangers. A few years ago the small fry were sold at Mentone for four sous (twopence) a pound; the larger for eight sous (fourpence). Last winter the small fetched twenty sous and the large thirty sous.

The gentle art is cultivated at Mentone by many zealous native piscatorians, who may be seen day after day fishing from the parapet of the quay at the entrance of the town, from rocks lying in the sea, or from the shore. Some of the visitors also, inspired by their example, occasionally enter the lists. Their patience and skill, however, meet with but a poor reward, as might be anticipated from what has been stated. Their principal recompense appears to be the lazy enjoyment of the harmonies of nature so dear to all who love the contemplative man's recreation. The melody of the

waves breaking at our feet, the surging of the blue waters over the sea-weed covering the submarine rocks, the varied hues that the fuci assume, as they are alternately expanded and buoyed up by the coming wave, and then left high and dry as it retreats; the effects of the ever-varying cloud, shadow, and sunlight on the sea, the rocks, the mountains, and the horizon, are never better observed, or more thoroughly appreciated, than by the unsuccessful angler. Very little piscatorial success satisfies the true lover of nature, and such nearly all enthusiastic piscatorians are. This love of nature is, I believe, the key to their oft-abused pastime. In the educated it is felt and analysed, in the uneducated it is felt as an instinct, a sensation, but not analysed.

Cuttle-fish are abundant in these waters, and are eaten by the inhabitants as a delicacy. They are occasionally found of enormous size. I have seen a monster at least six feet in length, with villanous-looking tentacula several feet long. Such antagonists would be very formidable even to a strong swimmer, if they attacked him. They could easily surround him with their suckers, and perhaps pull him under water; but I have not heard of any such accident. Monstrous cuttle-fish, with shells twelve feet in circumference, characterized the warm seas of the chalk period and of the epoch in which the nummulites of the St. Louis rocks existed. These "strange fish" have long ago

died out, but probably those I have seen are their lineal but degenerate descendants. The small and beautiful nautilus is still alive, although it, too, lived in those remote days along with its awful companion.

The fishing for euttle-fish is quite one of the features of the place. The boat is rowed gently along the shallow parts of the bay, where the rocks are covered with sea-weed. In the prow sits the fisherman, holding a long stiek, to which is tied a piece of meat as bait, partially covered with a few green twigs. This pereh is poked among the sea-weed, under the rocks and stones, in likely places. If the euttle-fish is there he makes a clutch at the bait, and elings to it with such extreme tenacity that he is easily hauled into the boat. At night the fishing is often carried on by means of a fire lighted in a kind of metal basket suspended over the prow of the boat. The fisherman uses a lance. He leans over the side of the boat and explores the bottom of the sea, by the glare of the fire, as the boat glides gently along. This night fishing has a very picturesque effect as seen from the shore.

All who sail on or live near the Mediterranean notice the peeculiar blueness of its waters. This tinge would seem to imply that they contain more salt than the waters of the ocean. The more salt held in solution by water, the bluer it is; the less salt, the greener it is. Thence the light green hue of the Polar seas, which

contain much more fresh water than those of the tropics. The latter are generally, from this cause, of a deep indigo, like the Mediterranean. The evaporation from the surface of the Mediterranean abstracts a much greater quantity of water than its rivers supply. Thence the strong current that sets in from the ocean at Gibraltar: and also, no doubt, the blue tinge of its saline waters.

The correctness of the above views has been questioned. I would, however, refer those who doubt to the first three paragraphs of Lieutenant Maury's very valuable work on "The Physical Geography of the Sea." It is, indeed, to this really fascinating book that I am indebted for the explanation I have given of the peculiar indigo-blue colour of the Mediterranean. It may be considered proved by facts derived from other regions of the world's waters and by actual experiments.

The Gulf Stream, which comes from the tropics, from the Gulf of Mexico, where the heat is extreme and evaporation very great, is of a deep blue colour like the Mediterranean. This colour is so different from that of the surrounding ocean that the line of demarcation is seen with ease, and in calm weather half of the ship may be seen in the Gulf Stream and half out. Analysed by Dr. Thomassy by means of a delicate instrument, the salt has been found to be 4 per cent. in the blue

Gulf stream, opposite Charleston; $4\frac{4}{10}$ per cent. in the blue trade-wind region; whereas it was only $3\frac{1}{2}$ per cent. in the greener waters of the Bay of Biscay. Again, in the salt-works on the shores of the Adriatic and of France, the vats or pools into which the sea-water is received for evaporation exemplify the fact. After standing some time in one pool for the purpose of evaporation, the concentrated sea-water is passed into another and so on. As it becomes more and more loaded with salt the colour gradually changes from light to deep blue, to indigo, and finally to a reddish tint when crystallization is about to commence. "The saltmakers judge of the richness of the sea-water in salt by its colour; the greener the hue the fresher the water."

The colour of the waters of glacier streams, of the Swiss lakes, or of the Rhine at Bâle, is quite a different hue to that of the Mediterranean. It is a kind of light bluish green, and is evidently owing to some other physical cause.

In describing the natural features of the Mentonian amphitheatre, I must not omit to mention that its olive and pine woods are alive with feathered songsters. The notes of some are very musical, and those of others reproduce sounds familiarly heard in the summer in our own pine forests in England. The same cannot be said of the small green tree-frogs that scramble about

on the branches of the olive-trees, or of their larger brothers that live in or near the banks. In winter they are fortunately silent, but as spring arrives they commence every evening an endless chorus, which lasts until after daylight, much to the dismay and distress of those who live in their neighbourhood. They certainly more than compensate for the nightingale, which arrives, as with us, early in May, and warbles all night long in every tree. The birds are mostly winter emigrants like ourselves, in search of a southern sun. The olives and pine cones afford them abundant food.

On the sea, near the shore, are constantly seen troops of sea-gulls, attracted by the household refuse which the inhabitants are rather too prone to cast into the salt water. When wind and storm are looming on the horizon they are more especially numerous.

The swallows and martins, as I have stated, never abandon the sheltered ravines and sun-heated rocky mountains of the Pont St. Louis throughout the winter. Their presence attracts hawks, and occasionally the majestic eagle, from the adjoining Alpine regions.

I have often lain in mid-winter for hours among the rocks of St. Louis, high above the blue vessel-dotted sea, with the wild thyme, the rosemary, and the cneorum in full flower around me, watching their movements. As they gain confidence the swallows in great numbers resume their rapid flight in and out of the

rocks, chasing the insects as on a fine English summer evening. Suddenly a noble hawk, occasionally a majestic Alpine eagle, appears, soaring aloft with wide-stretched pinions. The poor swallows, stricken with fear, instantly seek refuge, and in a few seconds disappear from the gaze of their ruthless pursuer. Sweeping from one rock to the other, he seems to enjoy the confusion and solitude he has created, and remains "the monarch of all he surveys."

The St. Louis rocks rise all but perpendicularly from the sea, on the eastern side of the bay, the road to Genoa being blasted from their side. They present near the shore a deep, irregular, and picturesque cleft or ravine, formed by a watercourse which falls as a cascade from a considerable height. The road crosses this ravine by a bold and elegant bridge of one arch, which is now the frontier between France and Italy. Masses of rock, irregularly divided and worn by the convulsions of nature and by the action of water and weather, form the boundaries of the ravine. They are partly naked, partly clothed with mountain plants, lentiseus bushes, thyme, the *eneorum*, valerian, and bluebell. These rocks are continuous with the ridge that ascends to the Béréeau, one of the highest mountains of the Mentonian amphitheatre (3580 feet). A few hundred feet above and from the sea, the scene becomes very wild and grand. The mountain assumes

the form of a fantastic mass of huge rocks and stones. In one region they form a species of stony torrent, arrested in its rapid descent, in another they are piled one over the other in every conceivable shape. It is the wildness and naked stony confusion of a mountain summit, within a few hundred feet of the level sea.

On the eastern side of the St. Louis ravine, lying on the side of the mountain, some thousand feet above the sea, is a very picturesque, grey-looking village, Grimaldi by name. It is seen from the town and the eastern bay warming itself in the sun, and is generally rendered conspicuous by patches of white which surround it. This is the linen of the inhabitants lying on the mountain to dry.

On the western side are the "warm terraces," as I have named them, the warmest region of Mentone. On the rocky mountain slope, the owners have scooped out and built a series of terraces, which have been entirely planted with flourishing lemon-trees. They owe their existence to a little streamlet of water that has been diverted from the ravine water-course, and irrigates the terraces, filling large tanks for summer use. Sheltered on every side except the south and south-west, saturated with sunshine from early morning to evening, the rock and soil never cool, and cold and frost are unknown, even on the exceptional cold days experienced at Mentone. Thus they constitute a kind

of natural hot-bed, in which vegetation is always in advance, and where winter is really unknown.

The stranger wandering among the rocks above these terraces, may accidentally find a small black metal cross. This cross commemorates a painful catastrophe that occurred a few years ago. A sprightly English girl of ten, whose parents occupied the villa below, escaped with a younger sister from their governess, and, in light-hearted play, scrambled up the rocks. Having reached this wild region, the elder one climbed upon a peak to wave her handkerchief in recognition to a friend below. Unfortunately she lost her footing, fell head-foremost, and was killed on the spot. There was universal mourning for the sad fate of the fair English child on the part of the kind-hearted Mentonians, and even now the fearful accident is never mentioned without deep sympathy for the bereaved parents.

The beach underneath and beyond the St. Louis ravine is singularly beautiful. The red limestone, or "red rock," as it is generally called, ascends perpendicularly to a great height, and the shore is merely formed of debris and advancing buttresses of the same formation, worked by the waves into the most jagged, irregular, and fantastic shapes. When there is a strong south-westerly gale blowing, the waves are thrown on these rocks with great force, and are broken into

foam and spray, that rise, with a noise like thunder, to a very great height. The sight is then very grand.

Along and on these rocks used to pass the road to Genoa, a mere mule track, as before stated. Remains of it still exist, and it constitutes one of the most picturesque and pleasant promenades. The view of Mentone and of its amphitheatre is very fine from this point. About half a mile beyond the torrent that descends from the St. Louis ravine, the path passes over a gully, by a bridge of one arch so thin and light, that it is crossed for the first time with some apprehension. It is said to be of Roman construction, and small as it is, seems worthy of such an origin.

Some bold rocks which here rise out of the sea near the shore, and give the command of deep water, are the favourite haunt of anglers. I have tried my fortunes, piscatorially, like others, but with very little success. Would not some plan of ground-baiting be likely to attract the finny tribe? I leave this question to those who are more learned than myself in the art. On the rocks hereabouts is found the "sapphire," which is not confined to the dizzy heights of Dover cliffs. This region is also a favourite habitat for the *cinerea argentea*, and for the elegant *Lavatera*.

CHAPTER VI.

MENTONE IN ITS MEDICAL AND SOCIAL ASPECT.

DURING the three winters that I have passed at Mentone, the foreign population has numbered from two to four hundred, and has contained representatives of nearly all the European nations. The French and English were, however, the most numerous, each family generally containing one invalid. Most of the latter were suffering from pulmonary consumption, in various stages.

The results of these three winters' residence have been, on the whole, much more favourable than I could have expected from my previous experience of consumptive disease in England. Those who were in the early or even secondary stages of the disease, and had vitality and constitutional stamina left, mostly did well. I have seen in many young persons well-marked, crude tubercular deposits disappear, gradually absorbed. In various cases of accidental phthisis in middle-aged, over-worked men, the amelioration has been still more apparent. I have seen well-marked cavities become partly or entirely cicatrized, and the constitutional

symptoms gradually subside; the general health and strength steadily improving.

Those who are in the later stages of the disease, on the contrary, appear to derive but little benefit from the change, although I have met with some exceptions to this rule. The malady generally seems to progress slowly but steadily. They suffer from the cold and the wind, and especially from the occasional outbreaks of wet chilly weather. Moreover, some feel bitterly the absence of home comforts, and their separation from friends. Some each year drop off in the course of the winter, as they would have done at home, from hæmorrhage, from pleurisy, from bronchitis, or diarrhœa. In their case, it appears to me that little is gained by the change of climate. They cannot avail themselves of its bracing capabilities for out-door life and enjoyment, and feel the variations, against which they cannot protect themselves as well as at home. Such patients, in the last stage of phthisis, emaciated, unequal to any exertion, evidently arrived at the concluding stage of their earthly pilgrimage, are, in my opinion, better at home, or in a warmer climate than that of Mentone, or of Italy generally—Madeira, for instance, where the temperature is said never to fall below 56°.

I would also include in this category those phthisical sufferers in whom the disease is rapidly passing through

its stages at home, especially if the disease is of an hereditary character. Change of climate can scarcely be expected in such cases to arrest the progress of a malady which is running through its phases with the rapidity of an acute disease. In some instances, however, of advanced phthisis, although very ill, the invalids, surrounded by dear friends, are so charmed with the sunshine, with the foreign scenery, with the vegetation, with the mountains, and with the sea, that it compensates for all their fatigues and trials. Indeed, I have known them rejoice in their presence under the sunny sky of the south, even in the midst of great suffering. Nor can any one, in such cases, regret the fatigue encountered in the journey from England.

Even among this class of patients I have repeatedly seen very severe and extensive disease arrested for a time, and life evidently prolonged; whether saved or not the future alone can tell. I have still oftener seen this occur with persons who, although very seriously ill were evidently not in so irrevocably hopeless a state as they were supposed to be at home. In framing a prognosis, medical practitioners are often unconsciously influenced by their temperament. Those who see everything *couleur de rose*, are hopeful up to the last, and can scarcely believe that their patients may not get well. Others of a less sanguine temperament soon give up all hope, and in some cases too

soon. In medicine, as in all other pursuits, the middle course is always the most difficult to steer.

In the midst of all the favourable influences of a southern sky, much depends, as elsewhere, on the antecedents of the patient, as explained by the laws of general pathology. Phthisis developed accidentally in a healthy constitution from hard work, exposure, or anxiety; phthisis connected with gouty dyspepsia,—an all but unrecognised form of the disease, although not so very rare,—is more likely to be arrested, or even eventually to get well, than the strictly tubercular or serofulous forms of the disease.

If I might presume to give an opinion founded on personal and professional experience, as to the form of ease in which a southern residence is likely to be beneficial, to be worth a great sacrifice, it would be as follows:—It is scarcely worth while to send a patient so far from home in the acute stage of the disease, when the lungs are both entirely disorganized, or all but entirely infiltrated with tubercular matter. If one is sound, or if the disease in both is limited, even if there be one large, or several small cavities, *it is* worth while to try what can be done by a thorough change of climate, by passing the winter in the south. Disease may be arrested, life may be prolonged, and a cure even may be eventually effected.

I certainly have infinitely more confidence and re-

liance on the value of a winter residence in the south than I had three years ago, when I first left England for the winter a confirmed invalid. As a practising physician in London, I had not seen the good results from wintering abroad that I have experienced and witnessed since at Mentone. The explanation, however, to me is obvious. Four out of five of my former patients and friends evidently committed all kinds of mistakes, which I could not guard them against then as I can now, as will hereafter be explained more fully. They travelled about for pleasure, when they ought to have considered themselves delicate invalids, on the brink of the grave, and have remained stationary. They lived in large, dirty, fever-poisoned southern towns, constantly occupied in sight-seeing more than health-seeking, and constantly exposed to many pernicious influences. Is it extraordinary that they should have often come back as bad, or worse, than when they started?

The most satisfactory cases that I have witnessed were those in which climate was not alone relied on, in which the patient was under constant and judicious medical management, in which the routine of daily life was guided by medical experience, and in which the various therapeutical resources that our improved knowledge of phthisis gives the profession were steadily persevered in. Patients left to themselves, or

to rules laid down for their guidance at home, commit all kinds of errors. They constantly omit to do what they ought to do, and carried away by the example of others or by the first dawn of improvement, do much that they ought not to do.

Persons suffering from pulmonary consumption should also be cautioned against trusting to the follies and delusions of homœopathy and of other modern fallacies. They should ever remember that they are labouring under a disease, curable in some cases, but usually fatal; from a disease that is still, with all our improvements in medicine, a verdict of death to a large proportion of those whom it attacks. Is it not, therefore, tempting Providence, throwing life away, abandoning the last chance of recovery, to discard the experience of ages, and to entrust life to the unknown professors of doctrines which every master-mind in Europe engaged in the study and practice of the medical profession pronounces insane delusions, to say the least?

Many persons who have always suffered from bronchitis in England are quite free from it at Mentone, owing probably to the dryness of the atmosphere. This remark applies to other similar climates. I have an old friend at Nice, a London physician, aged fifty-five, who abandoned London six years ago, owing to repeated attacks of winter bronchitis, which at last led

to very serious complications. He made a winter settlement at Nice, and has there passed the cold season ever since, perfectly free from all bronchial mischief, and in flourishing health. In several cases of this description, the attempt to spend the winter in England is attended with a return of the bronchial affection with its usual severity.

In one case that I attended during the first winter a gentleman aged forty-three, with softened tubercles, who had suffered from sore-throat and bronchitis for nearly four years in England, lost all cough and laryngeal irritation after a few months' residence at Mentone, and has had no serious return during that or the following winters. In this case phthisis followed persevering attempts to get rid of gout in the chronic form, supervening on the first acute attack. Exercise, and a rather low diet, were evidently, in this instance, carried too far, and continued too long, considering the arduous nature of professional pursuits. This patient, who got rid of gout merely to fall into tubercular cachexia, is now quite convalescent.

It is easy to understand that a dry, bracing, cool, invigorating climate such as I have described, should have a beneficial influence on the respiratory mucous membrane of the persons who have still some of the vital power of youth or some constitutional stamina left. When we add to this, all but daily exercise in

the open air throughout the winter, in the midst of magnificent scenery, removal from the cares, anxieties, and duties of ordinary life, pleasant social intercourse with fellow-sufferers and their families, all tuned to the same unison of cheerful and hopeful resignation, we certainly have united all the hygienic influences calculated to renovate the general health, and thus to arrest the development of tubercular disease. Indeed, to me it is a question, whether a warmer and milder winter climate, which is only to be found in a tropical or subtropical region, is not less favourable to the recovery of health under such circumstances;—always provided rigid attention be paid to the precautions necessary in a region where the temperature so constantly varies. Heat and moisture debilitate and relax the economy: moderate cold and a dry atmosphere invigorate and strengthen it; and in the treatment of phthisis, the renovation of the general constitutional health is of primary importance.

In the first edition of his valuable work on Pulmonary Consumption,* Professor Bennett of Edinburgh drew the attention of the medical profession to the fact that persons labouring under tubercular disease of the lungs were generally worse in very warm summer weather than in dry cold winter weather.

* On Pulmonary Consumption, by Prof. Bennett. Second Edition. 1860. Edinburgh.

My own experience, as well as that of various friends who have practised in tropical climates, tends completely to corroborate his views. The army reports during the last thirty years, substantiate also the correctness of this view. It is found that consumptive patients do not get on well in the hot weather in warm climates. The tubercular deposits have a tendency to soften under the influence of heat, the debilitating perspiration to increase, and diarrhœa to become permanent. Moreover, the heat destroys the appetite, induces languor, and renders exercise impossible, thus striking at the root of all constitutional improvement. And is not such an improvement the only real mode of arresting the course of the disease?

This fact has become so self-evident in the French army in Algeria, that the consumptive patients are now sent to France before the hot season commences.

It is of extreme importance that the truth of the above-mentioned views should be generally known and acknowledged. In times still recent, a contrary opinion prevailed generally, and consumptive cases were very erroneously sent to warm climates, as to the region best calculated to arrest the progress of the malady. An old and esteemed friend, Dr. Dundas, who practised for twenty-five years at Bahia in Brazil, and during that lengthened period enjoyed the confidence of the entire British community, has repeatedly told

me that throughout his residence he was constantly receiving from Europe consumptive cases, that merely got worse and died if they remained. So convinced did he become that the climate, although otherwise healthy, was not suited to consumption, that he used invariably to send to Europe the cases of phthisis that occurred among the English residents.

When bronchitis, or the tendency to bronchitis, is accompanied by asthma, either spasmodic or emphysematous, the usual capriciousness of the disease is exemplified at Mentone as elsewhere.

One of my friends, an eminent Swiss physician, aged fifty-six, who left home in an all but dying state, from bronchitis accompanied by pulmonary congestion and asthma, rapidly recovered and passed a very comfortable winter, habitually free from thoracic suffering. Another, an English physician, aged thirty-six, was attacked with severe spasmodic asthma a few days after he came to our hotel, which is only a few yards from the sea, and had to leave abruptly. He soon got well at Nice, away from the sea, and spent the winter there in good health.

The latter gentleman suffered in England when he was near the sea; and I may remark, that nearly all persons who in England are ill when living in immediate proximity to the sea, appear to suffer at Mentone. Indeed, I should advise no such persons to go there,

unless they can obtain one of the few houses built away from the sea, as nearly all the houses for visitors are immediately on the shore.

To live at Mentone, in a large proportion of the houses, is really like living on shipboard; for, as already stated, the greater part of the inhabited district is a mere ledge at the foot of the mountains. There are very few villas inland. To chest cases in general this proximity is, I think, decidedly beneficial. Sea voyages are universally recommended in such diseases, and salt is lauded by some modern physicians as a panacea for phthisis. Moreover, the air coming from the sea must be pure and wholesome.

There is one class of patients that do not appear to me to benefit by the climate at Mentone—those suffering from the more severe forms of spasmodic and intermittent neuralgia. I presume that the dry, keen, cool air of the north Mediterranean coast is in general too stimulating for such cases. In one, that of a lady, a former patient of my own, whom I had sent from England on account of agonizing tic which usually lasted all winter, and who had been free the first year at Palermo and Naples, the tic returned with its usual violence at Mentone, and lasted several months; as it would have done in England. During subsequent winters passed at Naples and Malta, this patient has again partially escaped. In some less severe

cases I have known the neuralgic attack, apparently roused by the cold days, long to resist treatment.

I must add, however, that in other instances patients liable to neuralgia have completely, or all but completely escaped, during the entire winter, from their usual enemy. It struck me that these favourable cases occurred in persons liable merely to neuralgic pains, more or less severe; the unfavourable ones in persons suffering from tic in its more aggravated form, a very difficult malady to deal with in any climate.

To those who, without having any particular ailment, are weak, ailing, dyspeptic, below par indeed, and who want invigorating and bracing, I have found the climate very valuable for a winter residence.

To weak, sickly children, the sunshine and out-door life appears to be inestimable. Each winter I have seen delicate children rally in a most marvellous and gratifying manner. Instead of suffering constantly from catarrhal affections, as is so often the case, they seem to enjoy a happy immunity from these ailments. Constantly out of doors, in the sunshine, they soon become ravenous for food, sleep well, and get fat and rosy. It is the very climate for the strumous children who constantly lose ground during our long northern winters. Climate alone, however, must not be trusted. Good food, plenty of air day and night, and judicious medical treatment, if required, are essential.

I have long remarked in England, that colds in the head, sore throats, attacks of bronchitis and influenza, generally become prevalent when the weather is both cold and wet. Cold weather alone does not produce them epidemically, nor does damp. However wet and damp it may be in England, or in the midst of the rain and mists of the west coast of Scotland, as long as summer weather lasts, and the thermometer is at or above 60° , very few colds are met with. Let it, however, fall to 40° , 45° , or even 50° , and then damp or wet weather is immediately followed by the development of catarrhal disease on a large scale.

It is worthy of remark that rainy weather, when the thermometer is not below 55° or above 65° , night or day, is not injurious to health. Indeed, the cool, rainy summers which we sometimes have in England, and which characterize the west coast of Scotland, are healthier than dry, warm, fine summers.

Thus, the summer of 1860, one of the most rainy known for many years, was also one of the healthiest. In 1861, it rained all but incessantly on the west coast of Scotland, from the middle of June until the middle of September. During the summer quarter, the results of observation at 55 stations of the Meteorological Society, showed that the rain-fall was 15.66 inches, instead of 8.80, the average of the previous years; and yet the season was unusually healthy. Thus the mor-

talities was 175 deaths in every 10,000 persons living; whilst in England it was 199. There was the usual difference between the town mortality and that of the country:—in the towns it was, in Scotland, 204 in every 10,000 persons, in England 220; in the country, in Scotland, 142, in England, 178. These data are taken from the quarterly report of the Registrar-General.

I was residing or travelling on the west coast of Scotland during the greater part of this quarter, and found that the temperature kept between 55° and 65° . I scarcely ever found it either above or below. I observed around me, also, as on previous visits, all but general immunity from catarrhal affections, colds, or coughs. I usually spent the day fishing, often under an umbrella, rowed in a boat on the lochs, and never once caught the slightest cold; although very liable to do so in a lower temperature if there is the slightest damp. In England the summer was much drier and warmer that year. Heavy rain no doubt acts beneficially in clearing the atmosphere, the earth, and the drains, of miasmata and putrescent matter; especially when it falls in great quantities in a short time, as in warm climates.

On the other hand, continued rain and damp with a temperature at or above 70° , predisposes to liver and intestinal affections, to diarrhoea, and dysentery.

At Mentone the winter temperature is generally much

below 60°, but the air is usually dry; and this is probably the reason catarrhal affections are rare. Whenever the weather is both cold and damp, they commence at Mentone, but die away as soon as the dry sunshine returns; even if the thermometer remains low. Those who enjoy the greatest immunity are those who keep their rooms cool and well ventilated night and day. Those who make large fires, who close their windows hermetically, and avoid every breath of air, are precisely those who suffer the most in this respect. I may instance the Germans and Swiss, who, accustomed at home to shut every crevice, and to treat the external air as an enemy, generally follow the same plan at Mentone, and suffer accordingly.

One of the most convincing proofs of the healthiness of Mentone is the general absence of severe accidental disease. During my three winters' residence I do not recollect having seen amongst the foreign population a single case of fever, malaria, dysentery, or indeed of any severe disease that could be attributed to external causes. The only serious diseases for which I was consulted were those that the invalids brought with them. This is the more remarkable when we consider that in many large continental health towns, such as Naples, Rome, Malaga, a considerable proportion of the foreign physician's duties consists in attending their countrymen for diseases of the above-mentioned nature.

To derive that benefit, however, from the climate of Mentone, and of the south of Europe generally, which it is capable of affording in thoracic disease, and especially in pulmonary consumption, the most rigid adherence should be paid to the hygienic rules peculiar to these regions during the winter season. It should never be forgotten that in winter the heat is sun-heat, and that the air, barring its influence, is usually cold. Warm clothes and woollen outer garments should be used. In dressing for out of doors, a thermometer, placed *outside a north room*, should be consulted.

Those who visit the South for the first time often think that summer clothing only is necessary, and that warm clothes and great-coats may be discarded. I have even known physicians at home, who should have been better informed, tell their patients so. Never was there a greater mistake. Summer clothes are useless from December to April. Those required are the light but warm woollen clothes we wear during our cold spring and autumn, with light over garments. The latter can seldom be safely dispensed with, even on the sunniest and warmest winter days, on account of the great difference between the sunshine and the shade. We may take a lesson from the native gentlemen, who, whenever it is not absolutely warm, cover themselves up to the chin with heavy cloaks.

The hours for out-of-door exercise should be between

ten and four, and the return should be so arranged as to secure the arrival at home before sunset. The Italian physicians appear to attach a mysterious noxious influence to the hour of sunset. In such a climate as that of Mentone and Nice, I am persuaded that the danger is in the rapid lowering of the temperature after sunset, which exposes to sudden chills, from the pores of the skin being often open at the time through previous exercise. As the same danger exists, even in midday, in passing accidentally from the sun to the shade, it is always necessary to be dressed for the latter.

The invalid should inhabit a south room, and never remain in a north room unless the weather be warm or it be warmed by a fire. The one is summer, the other winter. When the weather is bad, he should make a good fire, and rigorously stay at home until it change. Sunshine and warmth are sure soon to reappear, and thus to bring the confinement to a close. After several days' chilly rain, as we have seen, sore-throats, colds in the head, coughs, and rheumatic pains begin as in England, but then the sun again shines, and they usually at once die away. All dinner and evening parties should be strictly forbidden to the invalid. He or she must be in before sunset, and not leave home again until the following morning.

Lastly, exercise and out-door life must not be carried so far as to produce permanent lassitude. Many of

the most confirmed invalids fall into this error—one easily committed, owing to the great attractions of outdoor life, to the all but constant fine weather, and to the injunction generally made to take daily exercise, if possible.

This last remark applies more especially to consumptive patients. Physical debility is a more ordinary accompaniment of phthisis than is generally supposed, and when it exists, much exercise is decidedly pernicious. In some cases, indeed, scarcely any exercise can be taken without impairing the digestion of food, and thus producing sleeplessness and extreme lassitude, —a fact not generally known, and clearly a result of the organic cachexia connected with the disease.

During the three winters I have passed at Mentone, constantly surrounded by consumptive patients labouring under every stage of the disease, I have become more and more convinced of the truth and importance of this fact. Those who do the best are those who accept their position cheerfully, who secede entirely from the valid part of the population, from their amusements and occupations, and are content to lead a quiet, contemplative existence. Happy are they if they can find pleasure in books, music, sketching, and the study of nature; if they can be satisfied to spend their day in the vicinity of the house in which they live, and to sit or lie for hours basking in the sun, like an

“invalided” lizard on his wall, following implicitly the medical rules laid down for their guidance. Nearly all the best cases I have met with have been among such. Those who have no mental resources in themselves, who are miserable unless engaged in active pursuits, fare the worst both in body and mind. They do not resignedly accept the forced inaction their disease entails upon them, are discontented and restless, constantly commit imprudences for the sake of amusement, and over-tax their strength by participating in the pursuits of the healthy and strong.

A good plan for the invalid is to drive to one of the many picturesque regions in the neighbourhood—to Roccabruna, the Cap Martin, the Pont St. Louis, the Nice or Genoa Road, or to the picturesque rocky beach,—to take the cushions out of the carriage, with a cloak or two, and to remain sitting or lying in the sunshine, in some spot sheltered from wind, for two or three hours. The range of observation is thus increased without fatigue, the glorious scenery of the district is seen and enjoyed in ever-varying phases, and the mind is refreshed by change.

On fine days, when the sea is calm, boats also can be had for a sail or a row, and air and exercise obtained without fatigue. Those who are equal to a sail and a drive the same day, can, according to the wind, sail east or west along the coast as far as Ventimiglia.

or Monaco, both distant about seven miles. They can then land and return by means of a carriage sent on from Mentone beforehand to meet them. The view of the mountains thus obtained from the sea is truly magnificent. Indeed, it is only from the sea, as I have stated, that the grandeur of the mountain and coast scenery can be truly appreciated.

With the above precautions, the climate is safe and beneficial; without them, it is unsafe and treacherous. This is evidenced by the great mortality of the natives of the Nice and Mentone districts, and of Italy generally, by pneumonia and pleurisy, two of the commonest maladies. Being badly clothed, never making fires, and ignorantly braving these atmospheric changes, the lower orders are constantly exposed to chills, and succumb in great numbers to these diseases, treated as they are by bleeding every few hours. Persons in the latter stages of phthisis more especially suffer from the slightest dereliction of the above rules, which they are not always the most careful to follow. Indeed, I have no hesitation in asserting that the improvement of the phthisical invalid depends on close attention to these rules, and is the more decided the more faithfully they are observed.

One great advantage of the dryness of the atmosphere, and of the absence of severe cold in the night, is that bedroom windows may be left open, more or less, without

risk of any kind, throughout the winter, and thus perfect night ventilation of the bedroom can be attained. This is a most important point both for the sound and the unsound, but more especially for invalids and for those who are suffering from pulmonary consumption, as demonstrated by Professor Hughes Bennett.

Invalids should invariably choose a south bedroom, as they thereby ensure a mild and equable night temperature throughout the greater part of the winter, even with the window open. The same rule, however, does not apply to those who are sound, or to those who have in a great measure recovered health.

In south rooms, saturated all day by warm sunshine, the temperature seldom falls at night below from 56° to 60° Fah., owing, no doubt, in part to the radiation of heat from the walls. In north rooms, on the contrary, the temperature approximates much more readily to that of the external atmosphere, unless raised by fire. With the window slightly open, it will range from 48° to 58° , according to the coldness of the night. This is a much more wholesome state of things for the healthy, as a moderate degree of cold at night braces and invigorates the system. The warm bedroom is a debilitating hothouse to persons in health. Indeed, a lower temperature by night than by day is indicated by nature; it is found necessary for the health of plants in all stoves, hot-houses, and conservatories.

The resources of Mentone for visitors are all but entirely in the out-door life. The scenery, as I have stated, is most grand and imposing in the mountain background, and most picturesque and romantic in the nearer hills and coast outline. Every ravine, every valley is a path of great loveliness, ascending gently towards the higher range. The flora is very abundant, and, as we have seen, most of our garden spring flowers grow wild in great luxuriance. The geological aspects of the country are very instructive, and afford constant occupation and amusement to those interested in such pursuits.

The great invalids, if prudent, mostly keep to the drives along the sea-shore; those who are stronger, mounted on sure-footed donkeys, ascend the mountain paths as far as their strength permits; whilst the robust and valid members of the community try their pedestrian powers by ascending the higher mountains in various directions. Whenever the sun shines there are protected valleys and sunny mountain nooks, where at all times, in December or January, as well as earlier, warmth, a quiet atmosphere, and flowers are sure to be found. What with these occupations, books and papers interchanged, and the harmonious intercourse of countrymen united by the bond of common origin and suffering, the winter passes pleasantly, merely saddened occasionally by the loss of some hopeless sufferer.

Although the Mentonian amphitheatre is limited, as described, it is sufficiently extensive to offer all but endless excursions to visitors, ill or well, and more especially to the pedestrians. The protected valleys and hills are very numerous and within the reach even of the invalid population. Once, also, the higher barrier of mountains has been passed, a perfect Switzerland opens out to the adventurous and valid tourist.

Within the immediate area of the Mentone amphitheatre there are other points of interest besides the valleys and hills. The drives are not numerous, but they are very beautiful in their entire extent, and are all within the peculiar shelter of the district. They are : the road to Roccabruna, to Nice, and to Monaco ; that to the Cap Martin, to its picturesque rocky point, to the ruins of the old convent in the centre, and to the new telegraph tower ; that up the Carei valley, which leads over the mountains to Sospello and Turin ; and that to Genoa, over the picturesque Pont St. Louis.

In cold weather the invalid should not go beyond the turn or highest point of the Genoa road, as there is a cold gorge beyond. But on a fine warm day the drive may be prolonged along the beautiful coast to Ventimiglia, a pretty old fortified town, with a large river (seven miles), or to Bordighera, four miles farther. On the return, if " imprudently " made towards sunset, a most glorious view is obtained when the highest part

of the road is reached, near Mentone. The entire amphitheatre is beautifully seen, and the setting sun behind the Estrelle mountains reveals their sharp outlines, the Isle St. Marguerite at Cannes, and the lighthouse at Antibes, as distinctly as if only a few miles distant. They are clothed, also, in the most magnificent colours, purple, crimson, and red.

The drive to Monaeo, about seven miles along the coast, at the foot of the mountains, is most picturesque. Being sheltered and in the sun all the way, it can be undertaken whenever the wind does not blow from the sea. Monaco itself is very interesting: a little town perched on a rocky peninsula all but surrounded by the sea. It is a calm and lovely scene on a fine sunny day, with its pretty little port, rock-surrounded, clear and blue, enlivened by two or three fishing-boats only.

For a few hours each day in fine weather it contains the lively "Palmaria," a little steamer of eighteen tons only, which plies daily between Monaeo and Nice at the expense of the managers of the "Cercle." It used to come on to Mentone three times a week, which was a great boon to the community; but the Mentonian visitors were deaf to the charms of rouge-et-noir, and as it did not pay on other grounds, it was discontinued. A direct communication with Nice by steam from Mentone is, however, talked of, as also is the port which the French Government are to construct

at Mentone. Certainly more improbable things have happened.

Mentone and the village of Roccabruna formed a part of the principality of Monaco from the early Middle Ages. The princes of Monaco held their small principality as feudatories of Piedmont, and although swept away by the torrent of the French revolution, managed to become recognised in their former rights at the treaty of Vienna. Their authority, however, was exercised harshly; and in 1848 Mentone and Roccabruna made a small revolution in imitation of France, drove the Prince away, and declared themselves independent. The happy independence thus gained, with Arcadian immunity from taxes or soldiers, they enjoyed until 1860, when the Prince of Monaco ceded his rights over his revolted subjects to the Emperor of France for a sum of 160,000*l.* and the dignity of senator. Monaco, his faithful city of six hundred inhabitants, he retained as the capital of his diminished principality, under the jurisdiction of France.

One of the conditions made with the French Emperor is the construction of the road to Nice; another, by no means so laudable, is the retention of the gaming-house at Monaco. The road will be the precursor of the coast-railroad to Genoa, already contracted for; and will certainly much enhance the pleasure of a winter residence at Mentone.

Monaeo, from its advancing so far into the sea, is rather too exposed to the mistral or north-west wind to be an agreeable winter residence. It was well known to the Romans; is often mentioned by classical writers; and has had a little history of its own throughout the dark and Middle Ages. Its princees have been small kings on their sea-girt rock, have often waged war, under the wing first of one powerful protector, then of another. The Sardinians, the French, the Genoese, have all in turn been allies or foes.

At last, as we have seen, their Prince has become a French senator, French laws are recognised, and a real annexation has taken place. It is singular, therefore, that the French Emperor should have allowed the Prince of Monaco to retain his gaming establishment, when none are permitted in France, when even the German Dukes are beginning to blush at this source of revenue, and to talk of abandoning it. But the oranges, the lemons, and the oil, are all but gone with Mentone and Roceabruna, and the Princes of Monaco are less than ever disposed, I presume, to abandon the motto of the Monaco of old :—

Son Monaco sopra un scoglio
Non semino e non raccoglio,
E pur mangiare voglio.

The Cap Martin, a peninsula covered with an olive-grove in the centre and a pine-forest on the coast-

margin, forms one side of the western bay, and offers great attractions. Then the eastern road to Ventimiglia and Bordighera is very picturesque and pleasing, winding along the coast, often at a great height.

The views are everywhere magnificent. I have been told by many that the scenery at Mentone is very like that of Madeira; only at Mentone there are several miles of level coast-road along the sea-shore, which at Madeira are wanting. To get a thoroughly good idea of the district, the stranger should make an excursion on foot, or on a donkey, to the mountain villages of Roceabruna (one hour), Castellare (one hour and a half), Gorbio (two hours and a half), and St. Agnes (three hours). The first can be reached in a carriage, the others only on foot or on donkey. St. Agnes, the most remote, is situated at the summit of the back ridge. The drive towards the mountain range along the new Turin or Sospello road, up to the point where it now ceases, four miles from the shore, is most interesting.

Roceabruna, Castellare, and St. Agnes are mountain villages, founded by their inhabitants, ages ago, on account of the facilities they afforded for defence. Roceabruna is about 800 feet above the sea; Castellare 1400, and St. Agnes some 2500. Until a recent period, the adjacent shores, and indeed those of the entire Riviera, were exposed to the constant attacks

of the Mahommedan pirates of the south Mediterranean.

For many centuries it was the Saracens, later the Turks and Moors of Tunis and Algiers, who periodically ravaged these coasts. Their forays were not for wealth, which the poor fishermen and labourers did not possess, but for slaves; for the women were handsome, and the men strong. To withstand these attacks, the inhabitants of the towns chose defensible situations, such as the steep promontories and eminences on which Monaco, Esa, Mentone, Ventimiglia, St. Remo, &c. are situated; fortifying themselves also with strong walls. The agriculturists sought safety by perching their villages on all but inaccessible heights, whence they could see their enemies approaching, and where they could easier defend themselves if attacked.

There are still men alive at Mentone, I am told, who, in the early part of this century, were seized on the coast by the Moors, and subsequently lived for years as slaves at Algiers and Tunis. That such should be the case is not surprising, when we reflect that piracy reigned supreme in the Mediterranean until the year 1816, when Lord Exmouth bombarded Algiers, and that it was not finally extinguished until the French took possession of Algiers in 1830. At the time of Lord Exmouth's bombardment there were thousands of European slaves in the galleys. These slaves were

mostly natives of the northern Mediterranean shores, taken at sea from the fishing boats and sailing vessels, or even from the coast villages and towns by sudden forays.

At St. Agnes and Roccabruna there are the ruins of ancient castles. That of St. Agnes must have been a place of considerable strength. Local traditions say that it was built by the Saracens, in order to keep in subjection the smiling districts which constitute the Mentonian amphitheatre. Probably, then as now it was a garden, rich in olives, in oranges and lemons, and was considered a desirable conquest by the southern invaders.

The castle of Roccabruna is evidently of much more recent date, although it goes back to the Middle Ages. It recalls the recollection of the stronghold of a "Rhine Baron," intent on levying black-mail on those who travelled along the coast-road from Nice to Genoa. Although a mere mule track, this road must have been much frequented in winter in the days when there was not a single carriage road across the Alps, and when winter rendered their snow-clad summits an all but impassable barrier.

All along the coast to Genoa may be seen at intervals the ruins of watch-towers, erected in former days in positions favourable to defence, or suitable for looking out. They evidently formed a part of the general

system of defence everywhere necessary against the pirates. These towers, the old towns, pressed into the smallest possible space, and surrounded with walls, the villages perched on heights up to which the inhabitants have to toil wearily after the day's labour, all vividly point to times far different to the present. They tell of life passed in constant alarm, of eyes constantly turned with anxiety to the sea, from whence the human hawks were ever ready to pounce on the young, the handsome, and the strong—of hearts torn by the distant groans of relatives in chains in a distant land. Such thoughts have often passed through my mind when gazing from some mountain height on the now peaceful scene below. Truly we, of the present day, have much to be thankful for; our lot has been cast in much happier times.

A waterfall called the Cascade is worth visiting. After rain there is a good fall of water, above a hundred feet high. The road is through Castellare and skirting the lower part of the back range, over which it falls. The return is by the Sospello road. It is a favourite place for ferns, and also for pines. The road from Castellare, a donkey-track only, taking the visitor to the centre of the background of the Mentonian amphitheatre, affords many lovely views. The entire distance is about nine or ten miles.

In the immediate vicinity of the cascade there is a

hermit's eave high up in the rock. Its very existence was a tradition until an English sailor climbed up a few years ago, and found some bones, utensils, a half-obliterated inscription, and a date, 1598. Last winter two of my young friends, Scotch deer-stalkers, again reached it, but not without running some risk.

The view from the castle of Roeceabruna is very beautiful, as also are those from Castellare, Gorbio, and St. Agnes. They are all four mere mountain villages, inhabited by the peasantry, who till the upper terraces; a simple, hard-working race, who know but little of the world and of its doings. In these villages the curé, or priest, is the great man, and the father of the flock.

From Gorbio to Roeceabruna there is a donkey-track over the hills that leads through a very beautiful mountain district, with magnificent views on every side. From this road is well seen, skirting the mountain side, an aqueduct, which brings water to Roeceabruna from a great distance. It was completed about twenty years ago. Before that the inhabitants of Roeceabruna were very badly off for water, and depended all but entirely on their rain tanks. Now they have a good supply from a spring that is never exhausted.

The language spoken by the peasantry is a "patois," semi-Italian, semi-French, but inclining to Italian. The proprietors and tradesmen all speak both Italian and French, but with them French appears to predominate.

minate. Nearly all the shop-signs are in French. In feeling, the Mentonians appear to occupy about the same midway portion, although their Italian sympathies predominate. At the time of the annexation they petitioned unanimously to be "left alone," but their petition was not allowed to see the light. They are rather a handsome race, with Italian features, black hair, and dark eyes. Many very handsome young women are seen.

There are at Mentone two experienced Italian practitioners, Dr. Bottini and Dr. Farina. A talented and amiable French physician, M. Bonnet de Malherbes, who practises in the summer at Cauterets, in the Pyrenees, has recently settled there for the winter season. I may also add that during the three winters that I have spent at Mentone I have always had the assistance of other English medical practitioners and friends, invalided like myself, in ministering to the medical wants of my countrymen. Two of these gentlemen, Dr. Siordet and Mr. Price, have, like myself, made a winter settlement at Mentone.

There are now many commodious villas and apartments to let furnished. There are also several hotels and several very comfortable boarding-houses. Chleriey's Hotel de la Pension Anglaise, where I have hitherto spent the winter, is the largest and best modern house in Mentone, and admirably situated. An English lady,

Miss Stafford, who has opened a private boarding-house, has met with great and deserved success. Her house has always been full to overflowing, and her inmates have invariably described themselves as comfortable and happy. In these latter establishments, the terms are about nine or ten francs a-day ; in the hotels, rather more. The best road to Mentone is by Paris, Marscilles or Toulon, and Nice ; the expense from ten to fifteen pounds, according to the amount of time spent on the road and the route followed.

Although only twenty-three miles from Nice, the distance appears, and really is, very much greater, owing to the Turbia mountain, nearly 3000 feet high, having to be ascended and descended. The journey, indeed, takes four hours, too much for an invalid to undertake twice the same day. A visit to Nice, therefore, entails sleeping there and is not even to be thought of except in very fine weather, as the mountain heights are cold and windy. This drawback, however, will cease to exist when the road about to be constructed along the sea-coast is finished. This road will precede the construction of the railroad which is to be made on the same levels. When it is completed, the drive from Mentone to Nice will not take a couple of hours, and will be one of the grandest and most beautiful in Europe. The really magnificent road from Nice to Villa Franca, just completed, may be considered a specimen of what the

entire road will be when concluded. There are, however, very great engineering difficulties to be overcome, and some years may yet elapse before the drive to Mentone from Nice can be made by the sea-shore. Mentone will then become a warm and sheltered suburb of Nice.

The Italian government is pushing on the railway from Genoa to the French frontier very rapidly. I found several thousand labourers at work last spring between Finale and Genoa, and I do not question but that it will be completed before very long. On the French side the railway from Toulon to Nice is to be opened this winter. When they are both completed, the two lines will be only separated by the small space between Mentone and Nice, and great as are the difficulties they will no doubt be gradually overcome. The opening out of uninterrupted railway communication with Italy during the winter months, until the Alps are tunnelled, will be of too great importance for every nerve not to be strained.

The uncertainty which reigned, until quite recently, as to the course the railway would take at Mentone has much interfered with building operations, and with the extension of the town. No one liked to build when fearful that the house once built might have to be taken down to make room for the railway. Thus, although the value of land in all eligible situations has quadrupled within the last four years, this increased value

has been all but nominal ; for no one, resident or visitor, durst purchase. I am told, however, that the line has been definitively determined. If so, the decision will, most assuredly, be the signal for great improvements, and for great extension of the accommodation for strangers. The Mentonians are now quite aroused to their own interests, and are rapidly shaking off the apathy of former days. * Nice capitalists, also, are beginning to invest their funds at Mentone.

Nice is a small southern capital, with its Italian opera and French theatre, its daily fashionable promenade and drive, its military band, and its swarm of gaily dressed people. More than half of the northerners who crowd there in the winter are not invalids at all. They are the cured invalids of former days, of all nations, to whom the southern winter sun has become a necessity. They are also specimens of the more restless of our countrymen and women ; Anglo-Saxons, who, after wandering all over Europe for years, settle down at last for the winter at Nice, on account of its social attractions, because it is near home, and because letters reach in forty hours.

Hitherto Mentone has been chosen as a residence by none of this tribe of health loungers. The Mentonians have all been real invalids, rather glad to escape from the gaieties of Nice, as well as from its dust and occasionally cold winds. As, however, many are becoming

attached to this picturesque Mediterranean nook, no doubt, in the course of time, a foreign population of the same description will also grow up.

The inhabitants of Mentone are exceedingly gracious and cordial to strangers, and are doing their utmost, in a quiet southern way, to render the place agreeable to them. A comfortable little Cercle, or club, has been built, which is well supplied with newspapers, and contains a billiard-room, card and conversation rooms, and a large concert-room, that can also be used as a theatre. The "Cercle" is situated on an esplanade, or wide sea-terrace, constructed in 1861, and to which the name of "Promenade des Anglais" has been given. It is intended to continue this terrace as far as the Cap Martin, when it will make a delightful promenade and drive.

Each winter a series of balls are given by the members of the "Cercle," to which the strangers are invited. They are well attended by the French, and also by many of the less serious members of the English community, much to the gratification of the Mentonians. The latter cannot at all understand that there should be any objection to entering into such festivities on religious grounds. Various other plans for the improvement of the place are on the tapis.

The inhabitants have invested, I was told by the syndic, all their savings—about 100,000*l.*—in building

villas and suburban houses for their visitors, and can now accommodate about four hundred comfortably and hygienically. These houses have been mostly built outside the town, along the sea-shore, so that they unite the climatic advantages which Mentone affords with the hygienic conditions that are equally, indeed more, necessary. There are a few villas built already at some little distance from the shore in the Carei or Turin valley, where it expands before reaching the sea. There is room here for a little suburb of villas away from the sea, which are much wanted. Thus Mentone is following in the wake of Nice, Cannes, Hyères, and Pau, where the residences prepared for invalids are principally suburban, and therefore hygienic.

In the town some of the best houses of the principal or modern street are let in apartments, or flats, furnished or unfurnished. These apartments are not as desirable for a residence as the suburban ones, but they are much more reasonable in price.

There is an English clergyman, the Rev. Mr. Morgan, settled with his family at Mentone, where he has built a house. Mr. Morgan may be considered the father of the English colony, as he was the first to make a permanent residence at Mentone, and it has grown up around him. His kind and intelligent sympathy is always enlisted in behalf of his countrymen, and his presence is a boon to all. The Church service was for

some years performed in a chapel made by throwing several rooms into one, in an old "palace" on the sea-shore, reached by thoroughly Italian streets—alleys we should call them. One of the residents, Mrs. Usborne, a relative of Mr. Morgan, presented last winter (1862) a valuable site in the eastern bay. A considerable sum of money had been collected during this and the preceding winter among the English, and the church was at once commenced. It is now completed, and will be open for divine worship this season. An attempt was made to obtain a site in town, equi-distant from both bays, where the strangers principally reside; but the plan had to be abandoned, owing to the high value of town land. The funds subscribed were inadequate to the purchase of the ground. Additional funds are still required, a small debt having been incurred. The church will hold above three hundred.

A few years ago Mentone was merely a small Italian town, like the other towns on the Riviera, with but little power to supply the wants of foreigners, and especially of the English, who, wherever they are, expect to be made comfortable. Being accustomed to the best at home, our countrymen when abroad fall into a state of extreme despondency if called upon to bear with coarse meat, sour bread, and bad butter. Every winter, however, has improved the markets, and now good bread, meat, poultry, eggs, butter, &c., are to be

had, although sometimes only with a little trouble and contrivance. Each winter the supplies have improved in quantity and quality, and this will no doubt continue to be the case. When the new road to Sospello is completed, it will open out Mentone to the Alpine districts, from which it is now separated by its own barrier of mountains. This is the region that principally supplies Nice, and when it becomes easily accessible, part of these supplies will no doubt reach Mentone directly.

At present, the principal reliance is on the markets of Nice and Ventimiglia, an Italian town of six thousand inhabitants, situated on the Riviera seven miles more to the east. The Mentonian amphitheatre itself produces little if anything beyond olive oil, lemons, oranges, and vegetables. The only good butter comes from Milan. Butter is made in the mountains, but probably not with the care and scrupulous cleanliness that are indispensable to ensure its quality. That produced in the extensive pasturages which surround Milan, is well known all over the north of Italy, and is really very good. It comes by steamer from Genoa to Nice twice a week, and is supplied to Mentone from thence. Poultry reaches from all parts—from the mountain regions around, from the coast towns, and even from Turin. Many fowls, turkeys, ducks, are brought by the diligence which travels daily between Turin and Nice, passing over the Col de Tende. Game

is to be had, but is very expensive, with the exception of hares, which are reasonable in price.

The mutton is furnished by the surrounding mountain regions, and is really good. I have been told by Scotch gentlemen, good judges in such a case, that it is equal to the black-faced mutton of the Highlands. The lamb is killed too young, but is still very tender, and good food for invalids. The veal is also killed young, and is good. The beef is sometimes good, at others indifferent, as it is likely to be in a country where there are no pasturages, and where it must come from a great distance. The natives of these regions, also, seem to be quite satisfied with the flesh of old cows and oxen.

The expense of living at Mentone has all but doubled since I have known it; that is within three years, and is now quite as high, if not higher, than at Nice. This is, however, easily explained, and I cannot say that the inhabitants of Mentone are to blame.

House rents have risen very considerably, owing to the demand having been very much greater than the supply, which raises prices all the world over. Many houses are now building, or in contemplation, which will no doubt tend to diminish rents, or at least to prevent further rise. Moreover, the neighbouring town of St. Remo, also a good winter station, is beginning to be alive to the money value of foreign residents,

and seems inclined to make an effort to please and secure them, which will create a salutary diversion.

The cost of living has greatly increased, but then the markets are infinitely better supplied, which accounts for the change. As I have been told by Mentonians, the dinners we positively require and exact every day at the hotels and "pensions" are to them festive dinners, which they never dream of unless to welcome friends for a marriage or a baptism. To provide this high standard of food to several hundred strangers, the country has to be ransacked for a hundred and fifty miles around; Genoa, Turin, Milan, Nice, are all put under contribution. In other words, our standard of living is very much higher than that of continental people in general, and especially of the inhabitants of southern Europe. We are so ready, likewise, as a nation, to go to any feasible expense to obtain what we want, that we inevitably double local prices wherever we settle in any number; and that all the world over.

There is an English grocer established at Mentone, Willoughby by name, who keeps a store of groceries and English delicacies, and whose enterprising and obliging disposition much facilitates "life" to his countrymen; for at Mentone, as elsewhere, they are quite at sea without English appliances. He acts as house agent, and any application for information addressed to him on the subject of houses, apartments, or

anything else, would meet with immediate attention: There is also a large bazaar or store kept by an enterprising Mentonian — Amaranthe — in which everything is to be found. M. Amaranthe, who is a very obliging, intelligent person, will procure any conceivable thing for his customers, if he has it not already.

A winter passed at Mentone is a drama; a little epitome of life. The place is so small, so separated by its mountain barriers from the rest of the world, and the number of resident strangers is so limited, that a kind of common tie binds them together. This feeling may not extend to the entire foreign community, but it is very strong among the members of the same nation. It is the same feeling of solidarity, of a common origin and object, that exists among the passengers of a ship on a long sea voyage. It does not, of course, include passing strangers, the visitors from Nice and those who only remain a few days or weeks in autumn and spring, on their way to or from Italy; they are looked upon as strangers. The true Mentonian family is composed of the winter residents, of those who have made up their minds to spend six or seven months in the happy smiling Mentonian valley.

In October the question is—who is coming? In November nearly all the winter residents have arrived, and have located themselves. Friends find each other;

unforeseen points of contact "at home" are brought out, and little groups are formed of intimates, of those who have the same ideas and sympathies. A kind of general notion also begins to get abroad as to who is the invalid in each family, and of the degree of illness.

Owing, partly, to my recommendations having been followed by my medical brethren in England, very few extreme hopeless cases of illness have been sent out these last two winters, and there have been few or no casualties among the English during the first few months. But this is not the case with the French.

By most of our countrymen and women the order to winter in the South is considered a boon; an opportunity of indulging the darling wish of seeing the world, and a real consolation in illness. To the French, on the contrary, it is the last drop of bitterness in the cup of sorrow. The French cling desperately to home, and to their own country, in illness as in health; and can with great difficulty be persuaded to leave, however severe their malady. Perhaps, also, their medical men have not the same faith in change of climate that we have. Thence, each winter, I have seen French patients arrive in the last stage of phthisis; so ill, indeed, that their bearing the journey at all has been to me a subject of surprise. A very few weeks after their arrival the last spark of vital power gives way. They are

gathered to their fathers, and the first wail of lament arises on the southern shore, where they have arrived only to die.

Then comes the close of the year, Christmas, with its home associations, and the new and wondrous sight of summer sunshine and lemon blossoms instead of the sleet, and snow, and gloom, which we remember, and of which we read, in the fatherland. Later, the new year, welcomed at Mentone as in France, and the festivities of the Romish Church. Lent, the Holy week, the carnival, are all celebrated according to the traditions of the middle ages, in a very picturesque manner, by the native population, as in the large Italian towns.

About the month of February the English community in its turn begins to suffer. Some of the invalids have struggled in vain for health and life. Change of climate, medical treatment, the devoted affection and tender care of friends, have all in vain struggled with the angel of death. His approaches although slow have been sure, and this life has to be abandoned for a better. These deaths cast a gloom on all the community. The departed have endeared themselves to the survivors; they have lived amongst them, have shared their joys, their sorrows, their exile feelings. The loss is felt to be a common loss; it is that of the passenger who has lived for months in the same ship, sat at the same table, walked the same deck.

At last March and April arrive, the glorious southern spring, the real spring of the early southern poets, of Homer and Anaereon, of Horace, Virgil, and Lucretius. Our own northern poets, unconsciously imitating their Greek and Roman predecessors, describe spring as it is seen in Greece and Rome, not as it occurs in our boreal climate. Thence the feeling of irritation we all experience when every year with us spring arrives, and instead of balmy zephyrs and sunshine, with a profusion of Flora's companions, it only brings cold, biting north-east winds, often with sleet and snow and a frost-bound soil. Here, indeed, with the exception of a few days of south wind and rain in March, the poetical spring has really arrived. The olive and orange terraces are enamelled with real garden flowers; and day after day troops of visitors, principally English, may be seen returning from mountain excursions, flower laden.

I would, in passing, earnestly request visitors not to pay the children and the donkey-women for seeking and bringing them flowers. Several of our more wealthy residents did so last season, without reflecting that by thus acting they were giving a market value to wild flowers. The result was felt at once. Peasants, who formerly delighted to allow children and strangers to gather the violets and flowers of no value whatever to themselves, began to guard them jealously, and

to drive off all who attempted to pick them. Were this to become general, half the charm of the mountain walks would be destroyed. I would also urge on all not to pull up flowers by the roots, or to allow children to do so; and not to wantonly destroy and deface flowering shrubs, or to pull up rare ferns not wanted for preservation; otherwise the mountain valleys and terraces will soon become, in all accessible regions, a wilderness, and grow nothing but the vegetables sown in them.

The sorrowing friends of the departed are gone. The survivors, improved both in health and spirits, are more keenly alive than ever to the harmonies and beauties of the sea, the sky, the mountains, and the earth. Plans for the future, which earlier in the winter appeared too uncertain to be contemplated, are once more taken into consideration, and the journey homewards is thought of. Moreover, Nice then sends to Mentone troops of healthy, pleasure-seeking people, strong, gay, and happy. They are merely anxious for novelty and mountain excursions, and desirous to escape the March winds, more trying with them than with us.

Then comes the comparing of routes for the return home, of plans for the summer, and finally the leave-taking and departure. Most are sorry, at last, to leave the little sunny Mediterranean nook, where they have spent many happy hours, and, it is to be hoped,

recovered health, or, at least, arrested the progress of serious disease. In many cases more friendships have been formed than would have been formed in years at home, and the new and valued friends have to be abandoned as well as smiling Mentone. In some instances, however, as in my own, the separation, both from friends and Mentone, is only a temporary one; there is the hope of again meeting.

Such is Mentone, physically and materially. I was so pleased with my first residence there, that I should have at once decided on returning the following winter, had it not been for the love of change, which impelled me to search for a still better climate. This desire for change is quite a feature in the invalid population met with in the south of Europe. It is in some respects beneficial in its operation, by giving the mind fresh objects of interest to take the thoughts from self, and from the many sacrifices which health exiles from home and their companions have to make. The difference between the smiling sunshine of a Mentone winter, a mere long English October, and our eight months' dismal season is very great, and yet there were few of the cheerful Mentonian exiles who would not gladly have returned to our cloud-obscured island, had it been prudent and possible.

The search after an unimpeachable climate, however, is in some respects rather like that for the philosopher's

stone, for the elixir of life, or for the quadrature of the circle—a fruitless one. This will be exemplified by my own experience, as detailed in the following chapter.

CHAPTER VII.

A TOUR IN SEARCH OF A BETTER CLIMATE.

THE TWO RIVIERAS—ITALY.

ALTHOUGH pleased with the winter at Mentone, I was anxious, as I have stated, on leaving England the following autumn, to find a still better climate, and, like most invalids, thought I might as well see a little of the world, and thus combine pleasure and profit. Like most invalids, also, I wavered between many places.

Madeira offers a mild, agreeable, uniform climate ; but then it is relaxing, and there is the tedious and generally stormy sea voyage. Dr. Mitchell has written a most seducing account of Algiers and of its climate ; and at one time I had quite decided on going there. Other reports, however, are not so favourable. The winters appear to differ greatly ; and I heard, from reliable friends, of two months' rain, one month of such dust that the sea is all but invisible from the land, and of one or two months of intense heat, during the six of winter. This view of the Algerian climate is supported by the acknowledged fact that the annual average fall of rain is 45 inches, whereas at

Nice and the Riviera the annual fall is only 25 inches. My thoughts, therefore, turned towards Spain.

But Spain is not without its drawbacks. The winter climate of the eastern shore seems very good, mild, sunny, and dry; but there does not appear to be any really good hygienic situations for invalids. Barcelona is a large town, with a cesspool-filled port in a tideless sea, like Marseilles and Genoa. Valentia has many miles of marshy rice-grounds in its immediate vicinity. Malaga is a town of 90,000 inhabitants, and is decimated by fever, cholera, and dysentery, not only during the summer, but also during the winter—a fact which does not say much for its sanitary state. Moreover, the hotels are inside the town, and there are no suburban villas that can be inhabited safely. In the winter of 1860-61, there were many deaths among the invalids in one of these hotels from the above causes. I may add that, in the opinion of my friend Dr. Edwin Lee, all the Spanish southern health cities are open to the objection that the heat becomes very great early in spring, so that invalids returning to the north of Europe often suffer from the great change, or have to prolong their stay more than is prudent. On the other hand, Hyères, Cannes, and Nice are only modifications of the northern Mediterranean climate described in the preceding chapters, and certainly inferior to Mentone.

I therefore determined at last to turn my steps to

Italy, and to critically examine the Eastern Riviera (R. di Levante), Pisa, Rome, Naples, and the more southern coast of Italy. Guided by previous knowledge of the country, and the information acquired during the preceding winter, I felt sanguine as to finding in Italy the "Eldorado" combining all the advantages of which I was in search.

In former days, in the days of health and strength, Italy exercised over me, as over all those whose minds are imbued with the history of the past, an indescribable fascination. Several times I escaped from the busy scene of professional life, and rushed to visit its cities and plains. Its classical, historical, and artistic souvenirs and attractions threw over it a charm that never palled. I then purposely threw aside the physician, in order to see nothing but ruins, battle-fields, paintings, and statues. Sickness and human decay appeared a profanation, and I strove to eliminate them from my thoughts, and thus to bring back none but pleasurable reminiscences.

Naples was the southern city, lying on the lovely bay where rises fire-crowned Vesuvius, where the revealed cities of Herculaneum and Pompeii, Baia, the islands of Capri and Ischia recall a thousand recollections. Rome was the former queen of the world, the cradle of Christianity, still studded with innumerable vestiges of its former grandeur. Florence was "La Bella

Firenze of Dante," the home of the Medici, the abode of countless artistic treasures. Pisa was the birthplace of Galileo, where the lamp that revealed to him the laws of the pendulum is yet to be seen hanging in the glorious cathedral. Whilst Genoa was the proud commercial city of former days, still grandly overhanging the sea it once ruled, still full of monuments and palaces, evidences of its former greatness.

This time the scene had changed. I returned to Italy an invalid in search of health, and the arts sank into insignificance; whilst hygiene, climate, and health questions ruled the day. With views thus altered, very different impressions were produced, and many important medical facts became evident, which, as a tourist, I had not perceived and analysed.

I entered Italy by Mount Cenis, and although it was only the 20th of October, there was a great deal of snow on the mountains, and it was very cold in the higher regions. Indeed, the weather was much too cold for chest invalids, who, if they cross the Alps at all, should do so much earlier in the season.

Genoa is not so much a medical station as a resting-place for travellers and invalids entering or leaving Italy. Its situation is admirable; at the angle of the gulf formed by the Eastern and Western Riviera, protected by mountains, and exposed to the south-western sun. Hence it is very warm in summer, but in winter

the protection afforded by the Apennines is incomplete, owing to a "defect in the armour." Behind Genoa the Apennines present valleys, through which the railroad from Turin has managed to find its way, and through which also the north-east wind reaches the town when winter has fairly set in on the plains of Lombardy. Still the protection is sufficient to make the climate perfectly different in autumn and spring. On the 22nd of October there was a heavy cold fog when I left Turin, which continued until we reached the mountain-passes, completely obscuring the horizon. Winter was everywhere, the trees leafless, and the soil denuded. The fog had left us when we emerged from the first tunnel, and the air had become clear, cool, and bracing. On escaping from the last, a few miles from Genoa, we had gone back to mid summer; the sky was blue, the sun bright, the air warm, the windows and doors were wide open, and the in-door life of Italy was in full operation. It was indeed difficult to believe that half an hour—the passage of a tunnel through a mountain—could have so entirely changed the climate and the aspect of all around.

Genoa presents two other disadvantages: it is a densely populated city, and, like all Italian towns, badly if at all drained, and unhygienically built. In all large towns in Italy the streets are very narrow, generally only a few feet wide. The object was no doubt twofold: firstly, to

provide for the exigencies of fortification, and secondly, to exclude the sun, the summer enemy. The towns and villages now found in the south are all historical; there are no cities like the busy thriving Lancashire marts, the product of manufacturers' activity in modern times. The towns and villages are those of the middle ages, and as such circumscribed within walls and fortifications, and perched upon heights for protection, just as they were hundreds of years ago. Such a style of architecture is proverbially unhealthy, especially in the south, amongst a population to whom the cleanliness and the decencies of modern civilization are as yet but little known. To crown the whole, all the principal hotels at Genoa are on the port, the receptacle of what drains there are, and tideless, as are all ports in the Mediterranean.

Owing to the above cause, although to the traveller one of the most picturesque and interesting towns of the Mediterranean, the native city of Columbus is not a healthy abode. The invalid, therefore, had better not prolong his stay, unless he have the command of a garden-surrounded villa in the suburbs. In the hotels it is better to choose the higher stories, as the higher the rooms occupied, the purer the air, and the less likely is the occupant to suffer from atmospheric impurity.

I must repeat, that throughout the continent the

traveller, ill or well, should leave the window more or less open at night, the air of the staircases and passages being all but invariably very impure, even in the best hotels. If the window is not opened at night, the bed-chamber is supplied from this vitiated source, foul air is breathed, and typhus fever generated. Whereas, if the window is opened, pure air is admitted, which never can do harm, night or day.

Descending the Eastern Riviera, the first town or village of any importance is Nervi, a station much esteemed by the physicians of the north of Italy for consumptive patients. Nervi is better protected than Genoa by the mountains, which approach nearer the shore; and being small, principally composed of one long street along the shore, it is free from the hygienic objections to which Genoa is exposed. Nervi did not, however, appear to me to present any peculiar recommendation to strangers. The vegetation is that of the entire Riviera coast, and does not indicate an exceptional climate. The position is not peculiarly picturesque, and I believe the accommodation to be found is essentially Italian, which does not in any respect satisfy the English. There is, however, a boarding and lodging house, under the direction of an English physician of Genoa, principally supported by the English. The proximity of Nervi to Genoa and Turin appears to me its principal recommendation.

Chiavari, the next town, is situated along the sea-shore, in pretty much the same conditions as Nervi, and presents no feature calculated to arrest attention.

Sestri, further on, is an exceedingly picturesque town, on the margin of a small bay, and at the foot of a high spur of the mountain chain, which runs into the sea. But it faces the north-east, and is screened from the south by the spur in question.

The road, which is very bold and picturesque, then crosses the mountain, and descends on Spezzia. I had retained from former travel a very high idea of the beauty of La Spezzia, and was quite prepared to make it my winter residence had I found the climate bear scrutiny; such, however, was not the case. The town is situated at the foot of a magnificent gulf seven miles in depth, bordered on each side by mountains of considerable height. The mountains also extend far inland behind, but they are not sufficiently high to intercept the north-east winds. As a necessary result of this mountain-surrounded situation there is a great deal of rain throughout the winter, and the weather is often rather cold, as is evidenced by the vegetation. Moreover, there are marshes of considerable extent at the foot of the hills which surround the town, and in the autumn malaria is rife. I therefore determined to pursue my journey.

Between Spezzia and Pisa there is only one spot worth mentioning, and that is Massa Carrara. The town is small and clean, open to the south-west and protected from the north-east by the high mountains in which the marble is worked. The orange-trees appeared larger and healthier than on any part of this coast. I should think it must be an exceptionally good winter station, and there is a good, clean, comfortable hotel. But it is a dull little place, having no view of the sea, although near it. Neither here nor elsewhere along this coast, either, did I see the luxuriant lemon-groves of Mentone. Indeed, the protection afforded by the mountains which form the background of Mentone is infinitely superior to anything met with along the Eastern Riviera between Genoa and Pisa, and the vegetation is much more southerly at Mentone, and indicates a much higher winter temperature.

This time I examined Pisa attentively under the climatic and hygienic point of view only, and left it with a most unfavourable impression. Pisa is situated in the open plain, some miles from the mountains which protect it. This plain does not show the slightest evidence of southern vegetation; it does not even contain the olive-trees so common along the coast and on the adjoining hills. Nothing is seen but the dry mop-headed deciduous mulberry, with vines, like old ropes, trailing from them. The town is surrounded by a very

high wall, which must impede ventilation. The streets are narrow, sunless, damp, and cold.

The far-famed Arno, which passes through the town, forming an arc, is a mere ditch or moat, like the moat of an old fortified town in the north of France; with stones instead of grass, and a sluggish dirty stream meandering at the bottom—a kind of open main-drain. The quarter of the invalids is a quay on the bend of this moat river, about a mile long, and bordered by gloomy fourth-rate houses. Here the invalids are condemned to walk up and down, looking at the stones and dirty water below, occasionally swollen into a yellow torrent by the rains. The sunless streets are so chilly that chest patients are seldom allowed to go into them. The country around is a mere dull, denuded plain, which even a southern sun cannot enliven. Moreover, it is often very cold at Pisa, more so than at Rome; there are often fogs on the Arno, and it rains constantly in winter.

To crown all, Pisa is an unhealthy town to its inhabitants, like Genoa, Florence, Naples, and all these ill-built, ill-drained, dirty, wall-eramped southern cities. The average duration of life is twenty-nine years at Pisa and Florence, and twenty-eight only at Rome and Naples; whilst in Paris it is thirty-nine, and in London forty-four. For corroborative evidence on these points I would refer to the chapter devoted to Pisa in Dr.

Carrère's highly esteemed work, entitled "Le Climat de l'Italie."

All experienced physicians attach extreme importance to the influence of the mind over the body. A cheerful, happy frame of mind favours the digestive processes, tends to promote sleep, and thus counteracts the influence of disease. The dreary, cheerless monotony of stones and mortar of Pisa, with its ditch river, must exercise a most unfavourable influence on invalids exposed to it for month after month. Once the magnificent cathedral, the far-famed leaning tower, and the Campo Santo, or cemetery, have been explored, there is literally nothing for the invalid to do. There is, it is true, the university, where many learned and celebrated professors hold forth; but its scientific collections and its lectures are only interesting to students, or to men of scientific and literary tastes. Even to them I question whether the university would not be a snare instead of a boon. Work of any kind, mental or bodily, they should avoid, unless it be a lounging botanical or geological ramble in the open air.

Florence is not a winter residence for invalids; it is a mountain town, and much too cold. From Pisa you pass through thirty miles of valleys and mountain land to reach it, and once there, you are surrounded by mountains on every side, many of which I have seen covered with snow early in November. The north

wind, or tramontana, is very trying to invalids when it blows, which is often the case.

Rome is a winter residence for healthy tourists, not for invalids ; Malaria reigns there, more or less, all the year. Every winter it makes victims, even among the healthy. When the north wind—the tramontana—blows, which is not unfrequently the case for several days together, it is very cold. Moreover, invalids should scrupulously avoid churches, galleries, festivities, and parties ; and what is Rome without these, the life of the Eternal City ?—merely a temptation and a snare. I may add, that all that has been said about the dirt, defective drainage, and general unhealthiness of Genoa and Pisa, equally apply to Florence and Rome.

Thus I had to continue my pilgrimage, and started from Civita Vecchia for Naples. I did not intend to remain there, but to go on to Salerno, the celebrated medical school of former days, which is near, and admirably situated. I also wished to carefully examine the bay of Gaeta, of the smiling and all but tropical luxuriance of which I had retained a very pleasing recollection. These plans, however, were not to be carried out. I again saw the bay of Gaeta, it is true, but under circumstances which made any exploration an impossibility.

Twelve years previous, after making a pleasure tour in Italy, and visiting Naples for the first time, with

unclouded delight, I started for Leghorn in an old steamer called the *Virgilio*. It was a beautiful autumnal afternoon, and the magnificent bay of Naples was perfectly calm, like a mirror. As we steamed gently past old Vesuvius, the classical coast of Baia, and the beautiful Island of Isehia, we all remained on deck, entranced with the glorious scene. On passing out of the bay, the bell rang for dinner; no one dreamt of being ill, and we all sat down, a merry English party, for nearly all were English tourists returning to fatherland.

But, alas! unconscious victims to Neptune, we knew not that the September equinoctial gales were due, that the barometer had fallen half an inch that afternoon, that the captain and seamen were anxious, and that we were destined to dire torments. When we reached the deck again the scene was already changing. The sea and wind were rising, and before nightfall we were in one of the worst storms that had been known for years. Our steamer was old and slow, not able to accomplish more than six knots an hour in fair weather. With the wind all but dead against us and a raging sea, her performances were anything but satisfactory. In thirty hours we only made about a hundred and sixty miles, and the storm continuing with unabated fury, and our fuel being all but exhausted, we had to turn about, to retrace our steps, driving before the wind, and to make for the port of Gaeta as a refuge.

Gaeta we eventually reached, to our inexpressible satisfaction, about seven o'clock in the evening of the following day, and fondly hoped that we were at the end of our troubles. But in this we were very much mistaken. The port is a military port, and, according to the rule of those days, at 6 P.M. all communication with the shipping ceased. So strictly was this rule enforced, that although thus driven in by stress of weather, with women and invalids on board very ill, we were not allowed to land. Provisions and coals were even denied us until the opening of the port the next morning, and until orders from the Government at Naples, twenty miles distant, had been received. We were thus obliged to spend the night riding with one anchor in a perilous, exposed anchorage, with fires out for want of fuel, and in danger of being blown out to sea or dashed against the rocks. As to provisions, if received, but few could have done honour to them.

By ten o'clock next morning, orders had been received from head-quarters to allow the "very dangerous crew" of the *Virgilio* to land, so boats were sent to the ship and a file of soldiers were drawn up on the beach. We were then landed between two rows of the soldiers, and marched up on foot, like so many convicts, to the town hall to have our passports overhauled. The storm was over, the sun shining gloriously, and by this time, after a forty-four hours' fast, we had become ravenous,

and implored our military escort first to march us to a café for breakfast. Our entreaties and oburgations were, however, all in vain. We were, I presume, considered dangerous people, vile liberals, revolutionists, not to be allowed to come in contact with the loyal inhabitants of Gaeta. We were therefore dragged ruthlessly before the "authorities," thence taken in the same military, or convict, style to the gates of the town, bundled into carriages, and with a soldier on each box driven to Mola di Gaeta, a village at the bottom of the bay. Here we arrived at midday, and, free at last from our escort, were allowed to repair the wants of nature. This repast was, I think, even more mirthful and pleasant than the one we had partaken of some forty-eight hours before in the bay of Naples. We were all sick of the sea, and separated to find our way homewards as best we could.

I and two of my companions determined, as a compensation for past dangers, to make a comfortable and leisurely progress. We got a carriage from Naples, and posted all through Italy, merely travelling between breakfast and an early dinner. This most enjoyable journey from Gaeta to Chambéry has remained in my memory, marked with a white stone. The weather was lovely, the country glorious, my companions cheerful, witty, and pleasant, and every now and then the sight of our late enemy the sea added a

very delightful sense of security to our enjoyment of the journey. I may add, that from that moment I became a most irreconcilable enemy to King Bomba, of whose hospitality to shipwrecked travellers I had had such a charming illustration.

Since this memorable expedition I have often made coasting voyages on the Mediterranean, but I have never again been caught in a storm. Firstly, I avoid the proximity of the equinoctial gales; and secondly, I carry a metallic or aneroid barometer with me, and consult it for two or three days before I embark, with the assistance of Admiral Smythe and Admiral Fitzroy's instructions. If the state of things is at all suspicious—that is, if the barometer is falling gradually—however fine, I remain on shore. I have thus several times avoided severe storms which I should otherwise have encountered.

On the present occasion we had left Civita Vecchia overnight, on one of the French steamers, for Naples. At five o'clock in the morning we were awakened in our berths by the steward, who told us that the steamer had run into Gaeta with dispatches for the French fleet, and that it was worth while going on deck. We all dressed rapidly, and when we reached the deck saw a sight which can never be forgotten. We were in the well-remembered bay, the haven of former days, and I could have fancied that I was still in the *Virgilio*, at

anterior, before the large promontory-crowned town. The night was clear and starlight, and so illuminated by a moon nearly full, that every feature of the mountainous coast came out clearly, as it had done during my dreary night-watch in times gone by. But the scene was very different, for one of the great events of modern Italian history was being enacted before our eyes. My former inhospitable host, Ferdinand the First, of inglorious memory, was dead, after suffering in his latter days, through dire disease, some of the agonies he had inflicted on so many innocent political victims. His son and successor, Ferdinand the Second, as a retribution for his father's crimes, was cooped up with the last remnant of his army in the fortress of Gaeta, then before me.

Gaeta crowns a rock several hundred feet high, which terminates a promontory, the northern limit of the bay and port of that name. The walls, the forts, the houses and the churches, built of white stone, shone in the calm moonlight. There were scarcely any lights to be seen, and the town appeared calm and asleep, as it were. But we knew that few of its inhabitants were asleep that night, for great events were taking place. Thousands were lying sick with fever and dysentery within its walls, and it also contained a king at bay, surrounded by a terror-stricken court—a king whose crown was escaping from his feeble hands.

At the foot of Gaeta, on the promontory that connects the town with the mainland, were many bivouac fires. They indicated the encampment of some thousands of royal troops, for whom there was no room in the town, and whose presence also served to protect it. Then a mile of darkness, and beyond, nearer the curve of the bay, glared in the dark a more extended collection of bivouac fires, covering the shore and hillside to a considerable extent, and indicating the presence of a much larger body of troops. These constituted the Sardinian army besieging Gaeta.

In the bay, a few hundred yards from us, lay a number of French men of war, brilliantly illuminated. All their portholes were open, and from each porthole proceeded a blaze of light; the guns were shotted, and the gunners were beside them ready to fire. A mile or so beyond the French fleet, thus prepared for battle, we could perceive another dark mass, formed of large ships, without lights: this was the Sardinian fleet. We were gazing with astonishment and interest at this dramatic scene, when a boat, manned by six sturdy seamen, left the French admiral's ship, and rapidly approached us. Several persons came on board our steamer, and we soon learnt the meaning of what was passing.

The previous day the Sardinian army had left Mola di Gaeta, and had made a vigorous attack on the Nea-

politan army in front of Gaeta. The Sardinian fleet had entered the bay, advanced along the coast, and supported the land troops very efficiently by its fire. The army of King Ferdinand, and the fortress of Gaeta itself, were placed in great jeopardy by the combined attack of the Sardinian land and naval forces, when the French admiral intimated to the Sardinian admiral the order to stop; threatening to fire, and sink his vessels, if he advanced. It was to support this threat that the preparations we saw were made; the gunners had been at their guns all night, ready to fire had the Sardinian fleet advanced. This extraordinary and uncalled-for step on the part of the French caused the greatest astonishment throughout Europe; it arrested the progress of the Sardinians, and was the means of delaying the fall of Ferdinand II. for several months. We carried the news to Naples, where it appeared to excite an all but universal feeling of alarm and indignation.

Naples exhibits the concentration of all the unhygienic conditions previously alluded to. More than 500,000 southerners are living in an extremely confined space, in high houses, in damp, sunless streets, in the midst of every imaginable abomination by which the eye and the smell can be offended. The drains all run into the tideless sea, or on to the shore. In the most fashionable part of the town, in front of the houses occupied by the

nobility and by strangers, is a narrow public garden, the fashionable promenade, "the Villa Reale," running for a mile along the shore. On this shore eight public drains empty themselves, not into the sea, but on to the sands; thence to trickle down by slow degrees. The largest of these drains is opposite one of the chief hotels, and is usually so offensive, that those who are alive to these questions always feel inclined to take a run in passing.

On the land side of the Villa Reale is the main drive, or street, "the Chiaja," and on each side of the pavement, as in most other streets, there are large slits in the road every few feet, a foot long and about an inch broad, to allow the rain-water to escape into the drains, which thus freely communicate with the exterior. It is between these shore drains on the one side, and the drain-ventilated street on the other, that fashionable Naples daily promenades, and it is by the side of this choice region that our countrymen live, and not unfrequently die.

The picturesqueness of Naples life, closely analysed, is in a great measure that of filth, dirt, and rags. The picturesque fishermen pass their lives fishing at the mouth of these sewers. The picturesque lower orders eat, drink, and sleep, as it were, in public, windows and doors open, if they have any. They are clothed in rags, which they appear never to take off until they

fall from them, and they are infested with vermin, which they scratch off each other at the street-corners. The town is surrounded by pestilential marshes, and is built, moreover, on a tufa rock, or kind of pumice-stone, so porous that it lets the rain soak in twenty feet, to give it out in dry weather by degrees. Thus, in winter, moss grows wherever the sun does not reach.

A few days after my arrival in November, the autumn rains commenced with a warm oppressive siroeco, or south-east wind. The torrents of rain that fell in the first twelve hours washed the streets and drains of their accumulated abominations into the sea. The wind and waves, on the other hand, drove them back again and again on the shore, whilst the wind, rushing up the open drains, escaped through the rain openings in the streets, and through the open closets in the houses. The smell throughout the entire lower part of the city was awful, and a considerable portion of the population was at once affected with abdominal pains, diarrhœa, and even dysentery. I was one of the first victims, and after nearly three weeks' illness, I abandoned all idea of exploring Salerno and the South of Italy. I had only one wish, that of returning as quickly as possible to pure, healthy Mentone. I therefore embarked on a Genoa steamer as soon as the barometer showed me that it was prudent so to do—through its

friendly aid escaping a violent storm, and reached Mentone safely in a few days. There I remained during the rest of the winter.

To conclude, however, about Naples and its bay. They are most fascinating to mere healthy tourists; for they are hallowed by associations and beauties of the most varied character. But to the invalid, Naples should be absolutely forbidden. Even healthy tourists, however, may hesitate about a prolonged residence. They should, also, rather choose the more elevated regions of the city than the fashionable Chiaja; or, at least, consult my valued and experienced friend, Dr. Bishop, who has practised twelve years at Naples, and knows it well. The defective sanitary arrangements are not the only drawbacks. When the wind is in the north-east, the Apennines in that direction are so low, that it passes over them, and they become covered with snow, and the cold is intense. When it veers to the south-east—the sirocco—on the contrary, the heat becomes intense, and the air, being loaded with moisture from the sea, is very oppressive. These extremes, following each other rapidly, are very trying and unhealthy. The north-west, or mistral, also frequently blows into the bay with great violence, and is a trying, dangerous wind to invalids throughout the Mediterranean.

It was not, however, without regret that I aban-

done Naples. Notwithstanding illness and suffering, I was beginning to feel the influence of its usual fascination. During illness, too, I had reperused Andersen's sun-impressed history of "the Improvisatore," and Lamartine's poetical tale of "Graziella, the Maid of Ischia." The wish became strong again to visit Pompeii, again to explore the orange-clad hills of Castellamare and Sorrento, to sail over the lovely blue bay to Capri, to Ischia, and to its azure grotto. Indeed, it required a strong mental effort to drag me from the Circean allurements of Naples back to quiet Mentone, where no great deeds have been done, where we must be satisfied with the charms of nature, and where the monuments are merely those of the earth's early history, in pre-historical ages.

At that time also the great and glorious political events that characterized the foundation of United Italy were being accomplished, and Naples was a centre of intense interest. The king, Emmanuel, made his first entrance into Naples as I was becoming convalescent, and daily passed under my windows (Nov. 1861); the entire population were wild with joy at their deliverance from the Bourbon, and at the regeneration of their native country. I also saw the Italian hero, Garibaldi, and that under circumstances so creditable to him, that I cannot refrain from mentioning them. He had come over to Naples to see his

friend the king, and insisted on remaining ineognito. He felt that the positive adoration the Neapolitans entertained for their deliverer would have led to demonstrations of the most enthusiastic character had he shown himself, and that the king would have become quite a secondary personage.

He therefore went to an hotel, like a private individual, and refused during his twenty-four hours' stay to receive any deputations, or indeed to allow his presence in Naples to be made known. Naples, however, heard of his advent, and the entire city was wild to see him and show him honour. I happened to go that very afternoon to the English reading-room, which is kept by two English ladies. I found them in the anteroom, standing and conversing with two gentlemen, one of whom was Garibaldi—a mild, amiable-looking man, of middle height, with nothing of the fire-eater about him. In a few minutes he took his leave, and the ladies then told me that they had known him intimately for many years, and that that morning he had sent word to them that he would lunch with them in private. True to his word, he came at the time appointed, and remained two hours with them in their little private parlour, eating fruit and singing songs and ditties to them. This little trait shows the amiable simplicity and warm-hearted faithfulness of the hero. When all Naples was anxious to fall at his feet, and the

king of his making was waiting anxiously to load him with honours, he preferred devoting his afternoon to the society of two humble friends of former days.

If the fascination exercised by the bay of Naples is so great that the invalid tourist cannot possibly tear himself away, I should recommend him to make the Island of Capri his head-quarters. The island is of limestone—a healthier geological formation than the soft tufa rock of Naples. The population is small, the scenery interesting, and there is a small hotel where tolerably comfortable quarters may be obtained. Then there are no marshes, and the air is constantly purified by the sea breeze. Dr. Bishop told me that he has long been in the habit of sending convalescents there, and with the best results. In fine weather there is daily communication with the mainland by boat and steamer. The isolation, however, would be nearly as great as that of Garibaldi at his island home of Caprera.

Dr. Bishop told me the history of a countryman, which is not only interesting, but points out a danger—a hidden rock on the path of the convalescent phthisical patient, and therefore deserves to be rescued from oblivion. This gentleman came to Naples some winters ago as a phthisical invalid. Although in an advanced stage of disease he rallied, and apparently regained his health. Unfortunately he became despe-

rately attached to a very handsome young Italian girl, below him in social rank. Unlike the hero of Lamartine's very beautiful tale of *Graziella*, he married the object of his affections, and retired with her to live at Capri. This unwise tie, however, involved him in many painful and trying ordeals. The storm of human passions had also been roused in an unsound constitution. It was the leaky ship going to sea, and exposed to the storm and to the hurricane. Disease returned, and made a rapid progress. This time nothing could arrest it, and his existence soon terminated.

Leaky vessels should remain in port, where, like Nelson's old ship, the *Trafalgar*, they may long ride with dignity on the smooth waters that surround them. The battle of life—its storms and tempests—must be left to the young and to the strong. The convalescent phthisical patient should ever recollect that he bears within him the seeds of death, that his disease may return any day, that he lives on sufferance, and that he should act accordingly. The truth should be known, and then bravely recognised and accepted.

As I have previously stated, the impression made upon my mind by the sanitary survey of the principal health towns of Italy was unsatisfactory in the extreme. The authors whose works I have read on winter climates have, it appears to me, made an extraordinary but all-important omission. They have studied winds, sun-

shine, cloud, temperature, protection, and all the various elements which constitute climate, forgetting *hygiene*.

And yet are not the laws of hygiene of more importance to the invalid than all the rest put together? Of what avail is it to place a patient suffering from a constitutional disease, such as phthisis, in the most favourable climatic condition, if every law of hygiene is violated—if he is made to live in the midst of a foul, badly-drained, badly-ventilated town, such as Florence, Rome, Naples, or Malaga? In these unhealthy centres of southern population, where the mortality is habitually very high amongst the healthy natives (much higher, as we have seen, than in our most unwholesome manufacturing localities), what right have we to expect the general health of our patients to rally? In reality, it would be as reasonable to send consumptive patients in the summer months to live in the worst parts of Whitechapel, Liverpool, or Glasgow, as it is to send them in winter to live in the centre of these unhealthy southern towns.

In former days, when the laws of hygiene were ignored by the medical profession as well as by the non-medical public—when fevers and plagues were merely studied and treated as inscrutable dispensations of Divine wrath, it was, perhaps, excusable for writers on climate to devote their undivided attention to meteorological ques-

tions. But now that the mist and darkness have been dispelled, that typhus fever, dysentery, and other town diseases have been traced to their causes—filth, defective ventilation and drainage,—we know that attention to hygiene is even more necessary for the recovery of health than for its retention. In choosing a winter residence, therefore, hygienic conditions should be first considered, even before warmth and sunshine.

If we are to be guided by such considerations, however, I must candidly confess that I have not yet seen a large town in the south of Europe (the health quarters of Nice and Pau excepted), the hygienic state of which is such as to render it a safe winter residence for an invalid. In most of these towns, moreover,—Rome, Florence, Pisa, Naples, Malaga, &c.,—the positions selected for and devoted to invalids are central, and owe their protection in a great measure to buildings; which secure to them the town atmosphere undiluted. Thus is explained the frequent deaths from “fever” amongst our countrymen, ill or well, residing in them, which we every year see chronicled. On the spot you are told that they have died from the fever of “the country.” But this fever of the country, as far as I could gather from minute inquiry, is no other than our own old enemy, typhus, under a continental garb. Its characteristic features may be modified by some malarious or catarrhal element, but the type is the same. The cause,

too, is identieal in the Italian marble palace and in the St. Giles's hovel—foul air inside and outside the house, everywhere.

Having failed to discover any more sheltered spot than the vicinity of Nice in the eastern Riviera, I determined, on leaving Genoa, to minutely examine the western Riviera, along which there are many populous towns and villages. Each successive station—Savona, Finale, Oneglia, St. Remo, Ventimiglia—was examined, and abandoned as inferior, until I once more found myself in the well-remembered site of my previous winter's experience. The conviction which this journey produced, that the Mentone amphitheatre affords infinitely superior protection to any to be found between it and Pisa, on either Riviera, will be explained by the following details:—

On no part of the coast do the mountains in the immediate vicinity rise in a chain to the same height—namely, from 3500 to 4000 feet. Nowhere do they recede in the same manner from the shore in an amphitheatre, as it were, so as to completely shelter from the north, east, and west a hilly district such as the one which constitutes the centre of this amphitheatre. Nowhere also is there such a background of still higher mountains lying due north, so as to protect in its turn the semicircular shore chain. This background of mountain-land extends fifty miles to the north into

Savoy, and is limited only in that direction by the Tenda, a chain which is above 6000 feet high. These higher mountains extend towards the shore in a southeasterly direction, and reach it at Finale, more than half-way between Nice and Genoa. Thus between Genoa and Finale the mountain which skirts the shore is neither very deep nor very high, whereas between Finale and Nice the depth and height of the mountain-land constantly increase. Consequently, the amount of protection offered towards the north increases in the same ratio, until at Mentone the greatest amount of shelter and the warmest climate of the entire Riviera is reached.

The various towns which skirt the coast are all naturally placed at the mouths of the rivers which form their ports; and the rivers of course empty themselves from valleys which break the mountain-line. These valleys being nearly always directed north and south or thereabouts, the towns are all placed in the coldest situations on the coast, at the entrance of breaks in the mountain-chain, down which the cold winds blow. A glance at the vegetation shows this: orange-trees retreat, and olives and pines take their place. Here and there, as the road winds along the coast, sheltered nooks and romantic little bays are seen at one's feet, where the orange and the lemon, the cactus and the pepper-plant, seem to thrive luxuriantly, finding

the same warmth and shelter as at Mentone. But in these exceptional corners there is generally no population—not a house; the traveller can only admire and pass on. Again, in the other Riviera towns the inhabitants are thoroughly Italian; they still live on macaroni, olive-oil soup, and bread, rarely indulging in meat, and ignore entirely the multitudinous wants and requirements of our “difficult-to-please” countrymen.

An exception, however, may be made in favour of St. Remo, which participates, although in a minor degree, in the special protection met with at Mentone. St. Remo is a town of some importance, about fifteen miles east of Mentone. It has 11,000 inhabitants, and many houses on the outskirts of the town that might be made agreeable to strangers. Moreover, it is in Italy thoroughly Italian, and none but the Italian language is spoken, which is a great charm to many.

The example of Mentone, the fact that land in the Mentonian Amphitheatre has much more than doubled in value within the last three or four years, is beginning to awaken the proprietors of St. Remo to the value of the northern invalids. I am told that a new hotel is building for this winter, and that several houses will also be prepared for strangers for the coming season. If the inhabitants will really prepare for strangers, as the Mentonians have done, I do not doubt

but that St. Remo will share in the prosperity of Mentone, and become also a favourite winter sanitarium. House rent will probably be and remain lower, owing to the greater size of the town. Living will also, probably, be less expensive, from the same reason. Thus, those who find Mentone too expensive, those who meet with no accommodation to their taste at Nice and Mentone, and those who wish to be actually in Italy, and to speak Italian, may safely pass on, and try St. Remo. If they do, and if the English colony should extend at St. Remo, it will surely improve every season, as Mentone has improved, and as is the case with all continental towns which are patronized by our comfort-loving countrymen.

The little town of Mentone was built, like all other Italian towns, for the purpose of defence. It is no exception, therefore, to the rule. Many of its older streets are sunless lanes, a few feet wide; but the visitors have nothing to do with them, and need never enter them. It is, however, cleaner than usual, owing to the great value of all refuse. The people—an industrious race—have to cultivate the rock, and have no pasturage, no cattle; only donkeys and mules. They husband their manure, therefore, with jealous care, and let none escape into the sea or elsewhere.

Thus, neither the land nor the sea is poisoned, as in the larger towns of the Mediterranean coast. This is

unquestionably one of the greatest health advantages of small localities. It is worth all the ruins and art treasures of Italy to the real invalid, with whom the main point is to save or to prolong life, not temporary pleasure and amusement.

I would here remark that the question of drainage is becoming more difficult at Mentone, as everywhere else, with the influx of strangers. Before their advent, every Mentonian, whatever his rank, having his patch of land, his olive or orange terraces, consumed the refuse of his house on his own property. The large hotels and villa houses, however, have introduced a new and difficult element.

What is to be done with their superabundant supply? To allow it to reach the shore and sea, as some thoughtlessly propose, would soon breed a pestilence, reproduce the sanitary state of Naples. Yet it cannot be taken away without disgust and annoyance to the inhabitants of these houses. In my opinion the best plan really is to collect it in cesspools or in tanks, well closed and well ventilated, and to take it away at intervals. Only, the mode of doing this might be much improved. A manure-pump, penetrating to the bottom of the tank, would render the operation quite easy with one twentieth part of the annoyance now experienced on the nights devoted to this distressing performance. M. Chleriey, of the Pension Anglaise, has established

two of these pumps, bought in London at my request, so we shall see how they operate next winter.

In conclusion, I must give one parting caution. The experience gained in the above tour has convinced me that it is impossible effectually to pursue health and pleasure at the same time. I am persuaded that no greater mistake can be made than to endeavour to combine sight-seeing with wintering abroad for health; or than for an invalid to accompany strong, healthy, sight-seeking friends or relatives. The invalid who winters abroad should be the main consideration. He should start neither too early nor too late, about the first or second week in October, go direct to his destination, and return home only when the fine weather is thoroughly established, towards the end of May. And yet nearly all fall into the contrary error. As soon as March comes, the wildest travelling plans are formed on all sides—often by the greatest sufferers. The object is the restless Anglo-Saxon desire to see the world on the way home; the result is frequently to bring the invalid into every kind of danger.

A very pleasant lounging homeward journey may be made through the south of France, with little or no risk; but such a journey by no means satisfies the majority of our invalid countrymen and countrywomen. Naturally enough it is Italy they sigh for, Italy they want to see: Genoa, Florence, Rome, Milan, Venice, the

glorious Italian lakes, and the grand Swiss mountains, with their glaciers, their torrents, and their pine forests. Thence the danger. The unwholesome towns I have described, the burning plains of Lombardy, the snow-covered passes of the Alps, are pregnant with danger, and should be avoided by the diseased until they have regained health, and can once more defy the elements.

A delightful and perfectly safe journey may, however, be made by those who are sufficiently strong and well to endure the fatigue of travelling, along both Rivas to Pisa and Leghorn, and thence direct by sea to Marsilles or Corsica. This latter journey I made last spring, as will appear in the next chapter, to my own very great satisfaction.

CHAPTER VIII.

CORSICA.

ITS PHYSICAL, GEOLOGICAL, AND SOCIAL CHARACTERISTICS—ITS
CLIMATE—AJACCIO AND BASTIA AS WINTER STATIONS—
OREZZA AND GUAGNO AS SUMMER STATIONS.

THOSE who pass the winter at Cannes, Nice, and Mentone, have, generally speaking, only the wide expanse of the Mediterranean before them. Occasionally, however, when the sea is calm, and the air is peculiarly clear, a bold mountain land, formed by a series of irregular peaks, is distinctly seen rising bodily out of the sea, on the far south-eastern horizon.

I shall never forget the impression this sight first produced on me. I had been some weeks at Mentone, and had sat day after day for hours looking at the open sea, which I supposed to be a liquid desert for many hundred miles, as far as the sandy coast of Africa. One morning, rising a little after the glorious Mediterranean sun had emerged from the eastern sea, I opened the window and looked out. To my amazement I beheld before me a range of mountain summits, like the Alps seen from the plains of Lombardy. It

appeared quite a glimpse of fairyland. As the sun rose higher and higher the distant mountains became indistinct, and finally vanished. This was Corsica. The irregular peaks were the summits of the Monte Cinto, the Monte Rotondo, and the Monte d'Oro, mountains from six to nine thousand feet high. I have often seen them since, but never with the same vivid distinctness.

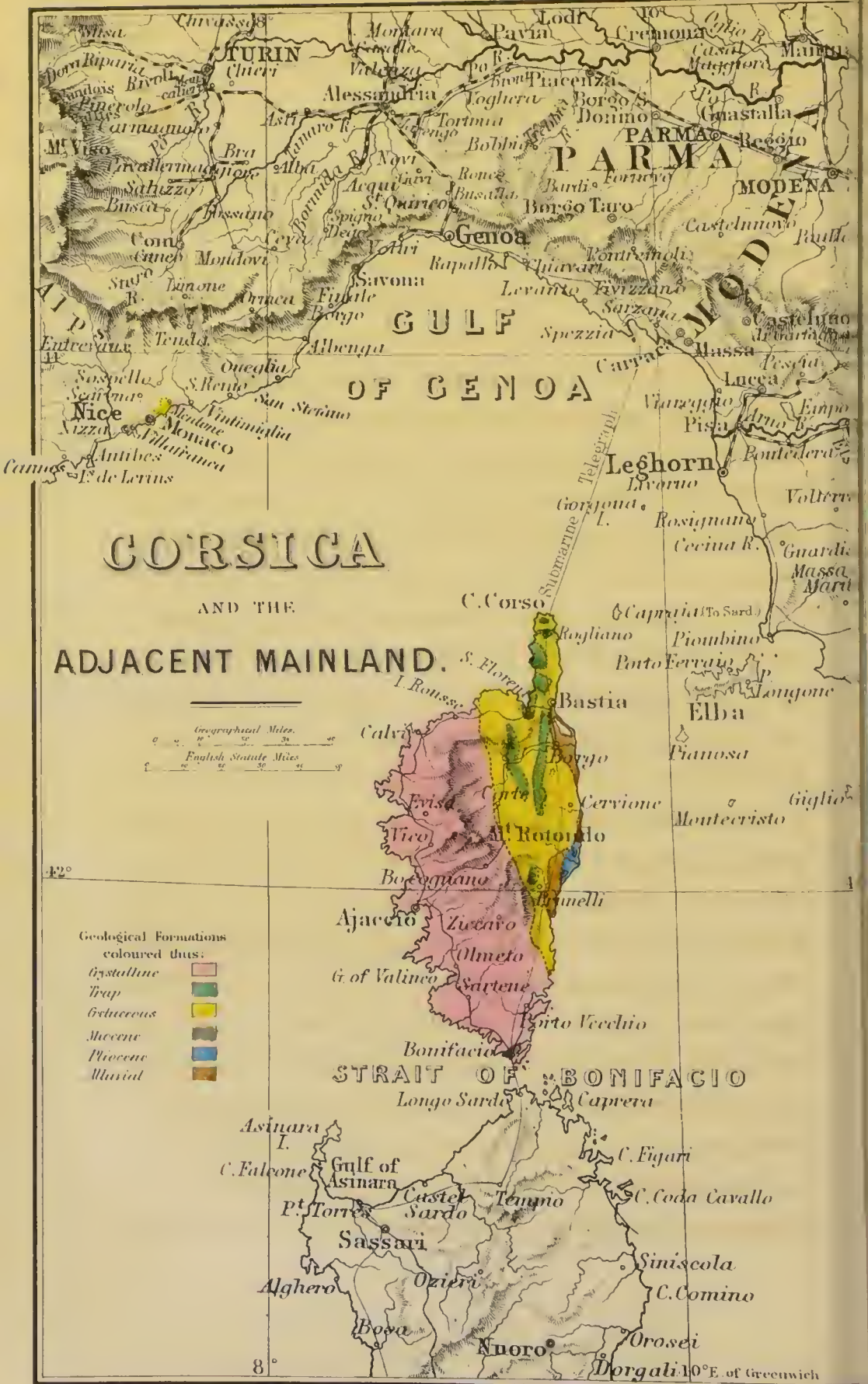
The period of the day when the Corsican mountains are most frequently and most vividly seen is just after sunrise, the sun being then behind them. As it leaves them, they rapidly fade and disappear. Sometimes, however, but rarely, they remain apparent throughout the day. Masses of white clouds resting on the higher mountains are often observed for several days together. That they are resting on the Corsican mountains is evident from their complete immobility. The distance from shore to shore being about ninety miles, and at least one hundred and thirty to some of the higher peaks—that of Monte d'Oro, for instance—the first, or lower two or three thousand feet of Corsica, cannot be seen at all, under any condition of atmosphere.

At Mentone these occasional glimpses of a far-distant land impart to Corsica a kind of mysterious charm. We have our beds placed in view of the east windows, that we may awake by times in the morning, and both luxuriously enjoy the magnificent hues of the rising sun reflected on cloud and water, and also scan the horizon

for the "fair island." When seen in the day, all communicate to one another the important fact; the more interesting from its portending, according to the weather-wise, a break-up in the weather—rain, or storm.

I may safely assert that nearly the entire English population of Mentone, under the influence of these feelings, is each winter possessed with a strong desire to visit Corsica. Not only was this desire all but irresistible with me, but I had other reasons for wishing to explore its shores.

During the last few years I have constantly drawn attention to the unhygienic and unhealthy state of the large towns of the south, misnamed health-towns, such as Naples, Rome, Pisa, Malaga, and Valentia. I have constantly pointed out that, owing to the absence of hygienic precautions, all these large centres of population in the south of Europe are unhealthy to the strong and sound who inhabit them, and totally unfit for the diseased, health-seeking community. I have also shown that, as a necessary sequence, the only safe residences for such invalids are small, sparsely-populated places, such as Cannes, Mentone, or the suburbs of towns such as Pau and Nice, in which extra-urban quarters and villas have been built expressly for invalids. These really healthy winter residences, however, are few in number, and are begin-



ning to be much overerowed; partly no doubt from the self-evidence of the above facts, once clearly brought before the medical and non-medical public. I felt, therefore, that it was in some measure incumbent on me to extend the area of the really eligible winter residences, and believed I might find in Corsica one or more really good winter stations. I also hoped to discover in its highlands a cool mountain station that would do as a summer residence, a want much felt by those who winter in the south, and do not wish to return to England in the summer.

On inquiry as to the means of reaching Corsica, I could gain but little information at Mentone. None of the inhabitants had ever been there, and they seemed to look upon it as a very inaccessible place, in a state bordering on barbarism. I therefore wrote to M. Fabiani, a bookseller at Bastia, the principal town, for a map and a local guide, and to Marseilles and Genoa for information about steamers. In due course I received all I had applied for, and found, as usual, that every difficulty at once vanished. I also met with two very agreeable travelling companions, an English clergyman and his lady, with whom I left Mentone for Genoa April the 15th, by the beautiful Riviera road. Two English ladies subsequently joined us at Ajaccio.

From Finale to Genoa we found the railway works proceeding with great energy. There was evidently a

large body of workmen (and workwomen) employed, and as the road was being attacked throughout the line it must progress rapidly. We entered Genoa on a lovely warm summer afternoon, and found the entire population out of doors in holiday costume. Genoa looked as beautiful and interesting a city as it ever does in fine weather. The night was spent at the Royal Hotel, which I can recommend, for not only is it comfortable, but it is kept by an English widow, who is very kind and attentive to all travellers, and deserving of support.

The next morning I went to look after the steamer, which starts every Friday afternoon, at six, for Bastia, touching at Leghorn. To my dismay I found that it was my old friend, or enemy, the *Virgilio*. I thought it had, many years ago, been broken up, either by the winds and waves, or by the hand of man. There was, however, no help for it, no other boat went to Corsica; and to the *Virgilio* we had to entrust ourselves.

The weather was beautiful, the sky clear, the sea calm, the barometer at set fair, and this time the old boat slowly but surely performed her allotted task. We steamed quietly along the coast, sitting on deck, and enjoying the beautiful scenery until dark. Then we went down and slept until we reached Leghorn early the next morning, but four hours later than we should have done by one of the ordinary Leghorn steamers.

After unloading cargo at Leghorn, and taking in passengers and goods, we again started at nine, and arrived safely at Bastia at four in the afternoon; the usual passage by a good steamer is five hours.

The engincer was a short, stout, good-humoured countryman of ours, and an interesting specimen of the roving Englishman. He was born and bred, he told me, at Liverpool, and came to the Mediterranean some twelve years ago. He had served in every part of that sea, and had never once been home. He had married an Italian woman, who lived with his children at Genoa. His pay was good, and, as he was quite comfortable and happy, he had no wish whatever to return to England. The *Virgilio* was a good sea boat, and so were her engines, but both were very old—he presumed at least thirty years. She was, he said, slow but sure, and safe in a storm, as, indeed, I had found her many years previous.

On a fine, warm summer's day, such as we were fortunate enough to enjoy the 18th of April, with an all but calm sea, the passage from Leghorn to Bastia is very enjoyable. As the vessel recedes from the mainland, the fine marble mountains of Massa Carrara are the prominent feature. Then as they become indistinct the island of Elba and the mountains of Corsica come into view. Elba, from the sea, appears merely a mass of rocks and mountains, with but little evidence of

vegetation. Still it will ever be interesting to the traveller as the first prison home of Napoleon the Great.

How singular his fate. Born and brought up in Corsica, he finally left it at the age of twenty-three. With the exception of a few hours passed at Ajaccio on his return from the campaign of Egypt (1799), he never saw Corsica again until, hurled from the height of human power, he was chained to this rocky islet, within view of his native land. Between these two epochs of his life, events unparalleled in history had taken place. He, the humble Corsican soldier, had been a great emperor, a king-maker and a king-destroyer, and had wielded the lives of men as if they had been sand on the seashore. Elba is the first land that vividly recalls to mind the great Corsican hero. From that moment his memory was scarcely ever absent from my thoughts. It pervades his entire native country, and is indestructibly mixed up with its past and present history. Indeed, it throws a kind of halo, if I may use the term, over the entire island.

Two other islands are also passed, Capraja and Monte Cristo. They are both mere barren rocks, but healthy, and capable of being rendered very fertile by human labour under the life-giving southern sun. Capraja is celebrated in the past history of Corsica from having been for centuries a field of battle between the Genoese and the Corsicans.

Monte Cristo, which has given its name to Dumas' celebrated novel, is a small, uninhabited islet, that has recently attracted attention through the adventures and misfortunes of its owner—one of our countrymen. This gentleman purchased the entire island some ten years ago, and settled upon it, in the regular Robinson Crusoe style, monarch of all he surveyed. He gradually brought a considerable area under cultivation, started a steamer of his own, and succeeded in establishing a flourishing little colony. Misfortune, however, overtook him in the shape of the Italian revolution. Some Garibaldians, on their way to Sicily, landed in the island, and pillaged it. Our countryman's sympathies were with the Duke of Tuscany, those of the six soldiers and of the serjeant, their commander, who formed the island guard, were with the revolutionary side. They quarrelled, he was insulted, and left the island, and the complete ruin of the colony rapidly followed. Redress was sought in the Italian courts, but without success. The Government refused to recognise the acts of the lawless Garibaldians in this the early stage of their career, and the Elba magistrates, siding with the serjeant and his men, fined our unfortunate countryman for rebellion against the "constituted authorities."

The English Parliament was called upon this session to take the part of the English proprietor, but after a

long debate, the ministers refused to interfere between the parties. Thus ends, for the present at least, an Englishman's dream of a little monarchy in the Italian seas. We have all of us, in our youthful days, longed for the possession of just such an island as Monte Cristo, and cannot but feel deep commiseration for the misfortunes of one who had thus bravely realized the boy's paradise. But is not the downfall of the little empire explained by the evident want of sympathy of the king of Monte Cristo for the popular Italian cause? If so, he has fallen with the political party he espoused, with his friend the Duke of Tuscany. It is a political, an historical fall, and not a social one.

As Corsica is approached its alpine character becomes evident. It rises from the sea as a chain of mountains extending from north to south. At the basement little hamlets are seen, five hundred or a thousand feet above the sea level, clinging to the wood-clothed mountain sides. The town of Bastia is not discovered until we are but a few miles from the coast. It then appears as a cluster of white houses rising gently above the shore.

We landed in a small and secure harbour, but so narrowed by the jetty that in bad weather the entrance is very difficult. Two years ago the mail steamer was lost through striking against this jetty in a stormy night, and forty souls perished, although within a few

feet of the shore. As we rowed quietly in, for our steamer was going on to Porto Vecchio and Sardinia and had stopped outside, the precise spot where the vessel had struck was pointed out to us. It was all but within the little harbour, so near land that it was difficult to understand the catastrophe. With the calm, smooth sea we then had, the entire crew might have jumped ashore.

The channel between Italy and Corsica is considered a smooth sea, for Corsica acts as a breakwater to the south-west and north-west; but still at times there is a very heavy swell in it, as I had experienced to my sorrow. This is more especially the case when the south-east, or sirocco wind reigns.

Twenty-five years ago, when an official in the Paris hospitals, I had a friend, a young Corsican physician, M. Piccioni, a clever, energetic man, whose professional prospects were even then considered very good. Our friendship shared the fate of many such youthful ties. We parted, he for his native country, I for mine, and never heard of each other again. As soon as we were comfortably settled in the Hôtel de l'Europe, an inn very similar to what we should find in a small French continental town out of the track of tourists, I inquired for the friend of former days. To my delight and surprise I found that he was alive, a flourishing, well-to-do man, and actually living at Bastia. I had also a letter

of introduction to Dr. Manfredi, head surgeon to the Bastia hospital, and the leading operating surgeon of the island. We were most cordially welcomed, I and my companions, both by the old and the new friend, and, thanks to them, ever after felt quite at home in the island. They transferred us to other friends and relatives at each successive stage of our progress, and as we were everywhere received with great cordiality, we felt quite at home wherever our steps were directed.

We remained some days at Bastia exploring the town and its neighbourhood, and then went to St. Fiorenzo. From thence we pursued our journey to Calvi, to Corte, and finally to Ajaccio, whence we embarked for Marseilles, having passed nearly three weeks very enjoyably in the island. The weather was splendid from first to last, the mountains were ever pure in outline and free from clouds, the sky was blue, the sun shone brightly, no rain fell, the country was in the glory of early summer, or of poetical spring.

I shall now endeavour to convey to my readers, as briefly as possible, the results of the experience gained during this tour.

Corsica is the third largest island in the Mediterranean, Sicily and Sardinia being both of greater size. It is situated between the 41° and 43° of north latitude, and between the 6° and 7° of east longitude. The distance from the coast of Italy is 54 miles, from

that of France 90 ; its length is 115 miles, its greatest breadth about 54 miles. Corsica is a mere mass of alpine ridges rising out of the sea like a vessel or the roof of a house. The mountains attain the highest elevation in the centre.

There are two mountain ranges which form the island, running longitudinally through it from north to south. The eastern range commences at Cape Corso, a narrow longitudinal mountain, some 3000 feet high, and more than 20 miles long ; its base is bathed by the sea both east and west. This range is secondary, calcareous, and descends to the south at a moderate elevation. The second range is primitive, granitic ; it commences near the west coast at Isola Rossa, rises rapidly to a height of 8000 and 9000 feet, and runs through the island down to its southern extremity.

The different geological nature of these two mountain ranges has, in the course of countless ages, modified the character of the eastern and western shores.

The eastern range, composed as stated of secondary calcareous rocks, is more easily disintegrated and washed away by the action of the elements. Owing to this cause the rivers which descend from its sides, and from the central regions of the island, through clefts which these calcareous mountains present, have deposited at their base alluvial plains of considerable extent. Through these rich alluvial plains several large streams

meander to reach the sea. This they accomplish with difficulty owing to the lowness of the shore, and to the prevalence of the sirocco or south-east wind, which constantly throws up large masses of sand at their mouth. Thence the formation along the eastern shore of large salt-water ponds, into which some of the rivers empty themselves.

Under the burning glare of a Mediterranean sun, these terrestrial conditions—large ponds of brackish water, marshes, and rich alluvial plains, liable to periodical overflow—embody all the elements calculated to produce malaria of the most deadly character. By such malaria is this region rendered all but uninhabitable for half the year.

The western, primary, granitic range of mountains, is the real backbone of the island. It must have been thrown up long before the secondary eastern range, is very much higher, and is covered in some regions with eternal snow. This range is jagged and irregular in its outline. It throws out spurs towards the western sea, which jut into deep water, and form deep bays or gulfs; as is usual with primary rocks.

Disintegration during the geological period has been slower, and the rivers have carried less soil to the sea. The alluvial plains are consequently all but confined to the mountain valleys, and the sea is very deep near the shore. On this side of the island are all the natural

ports, with the exception of the one already mentioned, that of Porto Vecchio. Thus there are no ponds, the marshes are few in number, and limited to the immediate vicinity of the outlet of the rivers; and malaria and intermittent fever are, comparatively, but slightly felt.

Between the two ranges of mountains there is a high-land region, an elevated Mediterranean area of mountains and valleys, which form about one-fifth of the entire superficies of the island.

The botanical productions of Corsica assimilate, as might be presumed, to those of the countries that surround it. The north, by its vegetation, approximates to the Riviera, the east to the Italian coast, the west to Provence and Spain, whilst the south shows African affinities. Taking a general view, I should say that the vegetation in the lower regions very much resembles that of the Riviera.

In the plains on the coast, cereals and Indian corn are grown in considerable abundance, and succeed admirably. On the lower hills and mountain valleys the olive-tree thrives and flourishes. The vine is also cultivated with great success, and admirable wine is made. It is of rather a fiery character, especially on Cape Corso and about Sartene. Higher up, the chestnut-tree grows to a magnificent size, and produces fruit of the very best quality. Entire districts, especially on

the eastern side of the island, are covered with splendid chestnut-forests. One of the eastern districts, indeed, having the little town of Piedieroe for its centre, is called the Castagneccia, or chestnut country. It has ever been famous in history for the unconquerable intrepidity and love of freedom of its inhabitants. Throughout centuries of tyranny and oppression in Corsica they have never been subdued, and that principally owing to their chestnut-trees. Formerly, and even now, their main food is the chestnut, with scant assistance from the oil of the olive-trees, the wine of the vines, and the flesh of the wild sheep, or mouflon, a native of the adjacent mountains.

The chestnut-tree wants no cultivation whatever, no watching. Like the bread-fruit tree of the tropics, it produces fruit that only requires gathering when ripe, and in this climate it never fails to produce a crop. Thus the inhabitants of the Castagneccia could fight all the year round and yet live. They might be hemmed in on all sides in their mountain fastnesses, all ingress might be stopped for years, and yet they flourished. These times have passed away; for more than half a century there has been peace in Corsica, but still the inhabitants of the Castagneccia retain their desultory habits. They live, I am told, in sober idleness, play at cards, and talk politics all day, and work as little as they can possibly help. Their artificial

modern wants, even, are easily supplied by the sale of the surplus crop, now rendered easy by the increased facility of communication with the Continent.

The cultivation of the olive-tree on a large scale would appear to engender the same apathy and disinclination to work on the part of the peasantry. There is one region called the Balagna, extending from St. Fiorenzo to Calvi, comprising a series of smiling hills and fertile valleys, which is a very garden of olive trees. It is renowned throughout the island for its richness and for its luxuriant fertility. A leading proprietor informed me that the peasantry, all proprietors, led the same "*far niente*" life of easy enjoyment as their countrymen in the chestnut districts. The olive tree requires a little more trouble, it is true, than the chestnut; it has to be trimmed and manured every year or two, the fruit has to be crushed and the oil sold. Still all this, like the labour of the Irish cottier on his potato-ground, takes but little time. Every year or two an abundant, easily-earned harvest of oil pays off debts and leaves a surplus to live on until the next be ready. Why should he work, says the peasant, when his future is thus secure? People cannot live, however, upon oil alone. It must be sold to maintain the grower, and owing to this reason, no doubt, the Balagna has from time immemorial been conquered and held by those who held the adjacent coast.

Above the range of the chestnut tree we meet with the *pinus maritima*, and above that, along with it in some regions, the *pinus larix* or lareh. This tree is a native of Corsica, and in no part of Europe does it grow to greater luxuriance and perfection. In some of the primitive forests, noble trees, more than one hundred and fifty feet in height are found. Above the pines come the beech, then the birch, and then the eternal snows.

These details of physical structure explain the history of Corsica. Like most mountain regions of a similar nature, for numberless centuries, from days anterior to those of the Romans, its inhabitants were at war with their neighbours, all of whom in succession tried to conquer them. The shores and shore-towns were successively in the possession of the Greeks, the Romans, the Saracens, the Spaniards, the Tuscans, the Genoese, and, finally, of the French. But the mountaineers were never conquered. Alternately defeated or victorious, they ever maintained their independence. Conquerors, they drove the invaders from their native soil. Conquered, they retreated to their mountain fastnesses, to the primitive forests which still cover a considerable portion of the island, to the neighbourhood of the eternal snow. There, who durst follow them? The attempt only brought destruction upon their pursuers. Such was ever the history of this small

community, then not numbering much above a hundred thousand souls; as noble a race of free men as ever trod the earth.

The history of Corsica is full of heroes, of heroic deeds, of romantic achievements. Each successive century bore patriots ever ready to sacrifice their fortunes and their lives for their country, as in the heroic days of early Rome. Nor were the opportunities for so doing wanting. No sooner was one enemy disposed of than another appeared. Peace never lasted more than a few years, seldom as long; and each successive generation had thus to renew the struggles which had tested the courage, the patriotism, and the endurance of its predecessor.

Is it surprising that the names of these Corsican heroes should be household words? that Giudice della Rocca, Giampolo, Sampiero, Pauli, and many others, should live in the affections of the Corsicans even unto the present day? Is it surprising that the Corsican women should have imbibed and shown, in times now gone by, the stern patriotism of the women of Sparta? or that their "voeros," or chants and national songs, should, up to this day, breathe a spirit of defiance and a love of vengeance unknown to the inhabitants of more peaceful regions?

A population which has for so many centuries—indeed until quite recently—lived in a state of constant

warfare against foreign tyranny and oppression cannot all at once ealm down to the social condition of eountries that have for centuries ceased to fight for their existenee. Thus is explained the exeptional social condition that still reigns in Corsiea.

The Genoese were, during the Middle Ages and until towards the end of the last century, the most persistent and eruel perscutors of Corsica. They established themselves in Corsica towards the end of the thirteenth century, and gradually gained possession of the coast towns and of a considerable portion of the island. War may be said never to have ceased from that time until the Corsicans surrendered themselves to France, in June, 1769, two months only before the birth of Napolcon Bonaparte.

In 1737 the Genoese, finding themselves hard pressed, applied to France for assistance. Cardinal Fleury gladly availed himself of the pretext to establish a footing in Corsica, and sent five regiments to their assistance. From that time the Corsieans had also to fight against France. They defended themselves desperately for thirty years, but at last their celebrated general, Paoli, was defeated, and they had to succumb.

The father of Napoleon I. was a prominent member of the patriotic or anti-French party. He was private seerctary to its celebrated chief, Paoli, at the time the capitulation was signed, and Corsica annexed to

France. A few months later his wife gave birth to the great warrior and statesman who was to wield with such terrific energy the destinies of the French, whom his countrymen then looked upon as foreigners and conquerors.

The great and virtuous Paoli, who for a quarter of a century had governed the Corsicans with the wisdom of a Solon and the courage of an Epaminondas, abandoned his native country, when it became a mere province of France, and took refuge in London. There he lived for thirty years, a glorious exile from his sea-girt island home. When I gazed on the magnificent mountains, the beautiful clear sky of Corsica, and the glorious azure sea that surrounds it, I often thought of the sad exile of former days. How his heart must have yearned for his own native land in the fog and gloom of a London winter. He could have returned had he submitted to the rule of France; but this his patriotic soul would not stoop to. He preferred to live length of years in exile in a northern land, and there to die away from the home of his fathers.

He once returned, but only for a few years. When the French became republicans they were ashamed at having extinguished Corsican freedom, publicly apologized, recalled Paoli in 1790, and placed him at the head of his countrymen. The latter soon tired of

republican tyranny, appealed to England, expelled the French, and positively annexed Corsica to England in 1794. Paoli and his English friends, however, became obnoxious in their turn. The Corsicans rose against them, returning to French allegiance, and the French dominion was again established in 1796, definitively throughout Corsica.

The generation of Paoli has long passed away. Mighty events—events that have shaken Europe to its foundations, and that have totally changed the fortunes and future destiny of the nation that annexed his native country—have taken place. These changes may be traced in a great measure to the genius and to the Corsican tenacity of purpose of the son of one of Paoli's companions and friends. The Corsican character, however, remains the same. The love of freedom, the firm resolve not to yield to authority against the dictates of conscience, still characterize the sons of Corsica. There are now Corsican exiles in London who reproduce the patriotic self-denial of Paoli; one of these exiles, I may be allowed to state, is M. Louis Blanc, so well known for the part he took in the Paris revolution of 1848, and for his literary labours both before and since.

It is a question whether the Corsicans, with their indomitable pride and individuality, would have submitted so completely to France, had it not been for

the marvellous rise of Napoleon Bonaparte, their countryman. As I have stated, Napoleon was born a few months only after the annexation, and by the age of twenty-nine he was general of the army of Italy, at that of thirty he was first consul, and at thirty-four emperor. The national feeling is still very strong with the Corsicans, and I have often heard it said, laughingly, "It is Corsica in reality that has annexed France, not France Corsica." Every man, woman, and child in the island is proud of the first emperor, and acquainted with every detail of his life. The advent of the present emperor to the throne of France was hailed with a shout of delight and patriotic love from one end of Corsica to the other, and nowhere has he more devoted adherents. Yet, to the stranger, the country is more Italian than French. Except in the large towns, Italian, or an Italian dialect, is the principal language, and the features and manners of the inhabitants, like the vegetation, are also decidedly Italian.

They complain rather bitterly that they are neglected by France, and that the very great natural resources of the island are not developed as they might be. This reproach to me scarcely appears just. The first Napoleon, it is true, did but little for his native country, a very singular fact. As we have seen, although born and brought up in the island, which he constantly

revisited during the first years of his military career, he never came to it again after his return from Egypt. Perhaps he was so totally absorbed by the hereulean duties that filled his career, as to have but little leisure to think of the material welfare of his native country. Perhaps he was disinclined to draw, in too marked a manner, the attention of the country he governed to his Corsican origin. On one occasion a decree was signed for some important public works at Ajaccio, but they were not carried out. This he only learnt years afterwards. When at St. Helena, his thoughts, however, reverted to the mountain island that gave him birth. He often spoke of it, and of what he had intended to have done for its welfare and prosperity had he remained in power.

Subsequent governments appear to have done for Corsica what they did for other departments of France, perhaps even more. The French centralized system of law, education, and road-making was everywhere introduced, and every facility given to the inhabitants to mentally improve themselves, and thereby to lay down the foundation of public prosperity. The roads that now connect the principal coast towns, and all but encircle the island, are excellent, as good as our high-roads in England, even in the most wild and uninhabited regions. There is also a very good road intersecting the island from Bastia to Ajaccio. It passes

over the two mountain-chains, and through Corte, the ancient patriotic capital of Corsica.

The great impediment to the material progress of Corsica up to quite the present time, has no doubt been the very abnormal social condition of the island. So peculiar and strange is this condition, so foreign to all modern notions, that it may be questioned whether the whole world could afford a parallel. The *vendetta* which characterizes it, must sap at the root all public enterprise and prosperity.

The vendetta is a system of vengeance to the death which has existed for hundreds of years in Corsica, and which was, until recently, recognised and approved by nearly the entire community, including even the less informed ministers of religion. Its origin is obscure, but may probably be traced to the constant feuds and warfare that have existed in the island, dividing the members of families and communities, and ever arming one against the other.

All Corsicans carried firearms. If one man considered himself insulted by another in any way, however trivial the grounds, he shot him. From that moment the family of the man killed was bound in honour to pursue the murderer, or in his default, some member of his family, and to retaliate blood for blood. This obligation descended from one member of the family unto another, until it often ended in the all but entire

destruction of both families. Villages, entire communities, would take up the quarrel of their members against other villages, other communities, and thus, in the absence of a public foe, they massacred each other.

According to a French prefect quoted by Gregorovius, whose *Travels in Corsica* I can recommend as a most fascinating book, 4300 assassinations occurred in Corsica between the years 1821 and 1852, in a population of two hundred and fifty thousand. In the two last years of this period the number was three hundred and nineteen. The peasant scarcely cultivated his field, for fear of being shot whilst at the plough, and his life was often passed in tracking or avoiding a foe. The women bred up in a savage sense of honour, urged their husbands and sons to these deeds of bloodthirsty revenge, sang wild songs of triumph (*voceros*) over them if victorious, and equally wild songs of lamentation if they were killed.

Many Corsicans in those days spent years of their life barriaded in their houses, which they durst not leave for fear of their pursuers. The story is told of one man who remained fifteen years thus barriaded in his house without leaving it. One day he heard that his antagonist was away, and ventured to go out and cross the road, only to fall dead on the other side, shot through the body by an enemy who had waited fifteen

years for him. I myself made the acquaintance at Isola Rossa of a gentleman, one of the leading proprietors of the island, who, a long while ago, actually lived for two years barrieaded in the upper flat of a house in that town to avoid the "vendetta." An iron door on the staircase, through which he could shoot any one approaching, protected and separated him from his relentless foes.

How could a country prosper under such circumstances? The French Government never would take the chivalrous view of the Corsican vendetta, but declared from the first that a man shot under these circumstances, was simply assassinated. If caught, he was tried, and either executed or sent to the galleys for life. This unpleasant mode of viewing the national point of honour in no way restrained the Corsican mind. They shot their enemies as before, and then retired to the mountains, where they could set the law at defiance, becoming banditti. At the commencement of the present century there were 1000 men in the mountain (*à la montagne*). The commandant of the gendarmerie at Ajaccio told me that seven years ago there were still 300.

These men were not brigands, such as we used to meet and still meet in Italy, in Calabria, and elsewhere. They were honourable men, who had vindicated their sense of honour, in accordance with the imme-

morial custom of their race, and with the approbation of the large majority of their countrymen. Once in the mountains, out of reach of the authorities, in the primitive forests of the Monte d'Oro, the Monte Rotondo, the Monte Renoso, or the Monte Inehudine, they merely wished to live. They killed game, their friends and relations sent them supplies, the peasants and shepherds gave them food, and helped them to avoid their enemies, the soldiers and the gendarmes. Thus they lived a kind of wild Robin Hood life; seldom, if ever, attacking travellers, or doing harm to those who left them alone. I have been told that a traveller, not an enemy, might have gone amongst them with his pockets full of gold without fear. They would only have politely asked him for a small pecuniary contribution, if they wanted it. Some few, however, were less honourable, less easily satisfied, even in those days, and could not have been thus trusted.

It was in vain that the French Government kept a regiment or two of soldiers in the island, and a large body of "moveable gendarmerie," accustomed to the mountains, and to mountain warfare. The vendetta was too deeply rooted in the minds of the Corsicans. The mountains were too inaccessible, and the population too favourable to these "honourable bandits," for it to be exterminated from the land. Only half-a-dozen years ago, therefore, very extreme measures

were adopted; measures which seem very strange in our times as applied to a department of France, to the birthplace of the present imperial family.

Two laws were passed by the French Chambers. By the one, the entire population was disarmed; it was made penal to carry firearms, or arms of any description, for any reason whatever, even including the pursuit of game. For some years there has been no shooting in Corsica. A landed proprietor cannot take out a gun, and shoot a bird or a hare on his own property, without the permission of the Prefect. When this permission is asked and granted, it is given for one, two, or more days, for a special district, under the name of a *battue*, and police-agents or gendarmes are required to be present. All the well-informed members of the community have cheerfully acquiesced in this law, and have surrendered their pleasure for the good of the community.

By the other law, the *loi du recel*, all persons harbouring or assisting outlaws are liable to imprisonment. This law has been stretched in practice in a very singular and draconian, but very effectual way. If a man kills an enemy, and goes to the mountain, the authorities instantly seize and imprison his relatives, and keep them in prison until he be caught or have surrendered. A very remarkable application of this law occurred whilst I was at Ajaccio. A bandit who had

killed twenty-seven people in his life, principally gendarmes, and had been out in the mountains above thirty years, had for some time disappeared, and was supposed to have gone over to Sardinia. In last April he reappeared, and was seen in the vicinity of Sartene, in the southern part of the island. I was told that sixty of his relations and descendants were immediately seized and imprisoned, and were in prison there when I left.

Inhuman as this step may seem, it has been attended with the most beneficial results. These men of bronze, who killed an enemy as they would a noxious insect, whom no human or divine feeling could restrain from shedding blood, are fond fathers, sons, and brothers. They cannot bear to see their children, their fathers and mothers, brothers and sisters, in prison, permanently, on their account. They either do not assassinate any longer, or they give themselves up to the authorities, and meet their punishment. There are now not more than a dozen outlaws "*à la montagne.*"

A singular feature in the history of these bandits or outlaws, is their attachment to their native land. They could easily get to Sardinia, which is only separated by a strait a few miles across, or they could take refuge in Italy. But the love of their native country is too strong. They prefer to lie out for years in the forests and mountains, to be tracked

daily like wild beasts, without hope of pardon or of eventual escape, to taking refuge in another land.

The commandant of the "gendarmerie," whose acquaintance I made at Ajaccio—a brave, open-hearted military man—has been ten years in the island, and they have been years of incessant warfare against the banditti. I heard many interesting details from him of the mountain warfare he had unceasingly waged—for such it is. He has several hundred men under him—all young, of great physical powers, and inured to hardships of every description. His attacks are principally made by night marches of twenty, thirty, or even forty miles, which enable him to surprise his wary enemy.

I expressed my astonishment that he was still alive, that he had not been assassinated, Corsican fashion, after so often leading his men in such desperate work; for he said he had sent scores to the galleys and the guillotine. He replied that the explanation was in the fact, that he had always treated the banditti as fair antagonists. He had waged honourable war against them, and fought them openly, as he would have done a military enemy. He had surprised them, and exterminated them when he could, but never with the assistance of treachery, which he despised and repudiated. So thoroughly convinced, he added, were the bandits of his honour, that were he that

evening to write and make an appointment in Ajaccio with the most notorious of the few remaining, they would not for one moment hesitate to leave their retreat, and come to meet him in Ajaccio itself.

One incident of the adventurous life of the worthy commandant is worthy of narration. He had been long pursuing a very desperate bandit, who had killed several persons, and had been in the mountain for several years, eluding all research. At last he heard that he was sleeping every night in a cavern, situated in a very wild and secluded district, high up in the mountains. By a night march he surrounded the cavern with a hundred and fifty men, and, certain of the outlaw's presence, summoned him to surrender. The only reply was a couple of shots, which killed one of his men. He then determined to smoke him out, and commenced piling a heap of brushwood before the cavern; but before this could be half accomplished, two more of his men lay dead on the ground, shot through the body by his antagonist. Anxious not to sacrifice any more lives, the commandant determined to starve out the bandit, being aware that his stock of provisions and of water was limited. He therefore drew round the cavern, which had only one issue, a double cordon of men in the brushwood, and waited.

For two days and two nights was this tiger-watch

continued. On the third night, towards morning, hunger and desperation prevailed, and the bandit made a sudden rush out of the cavern. Twenty guns were instantly levelled at him and fired, and he fell dead ; but not before he had had time to single out and deal a death-shot to one more of his enemies. Thus the destruction of this man cost four valuable lives. This dramatic incident occurred only a few years ago.

It was easy to see that the worthy commandant had entered thoroughly into the spirit of his arduous career ; indeed that he enjoyed it. His eyes sparkled whilst he told me of the long night marches, of the ambuscades, of the surprises, and of the manœuvring, which form the main features of this mountain warfare. No doubt the excitement and uncertainty of this kind of campaigning has great charms for men fond of adventure.

The difficulty of seizing an outlaw who is supported by the warm sympathy of the entire population, and is assisted by them in every way, is well illustrated just now in Ireland. In a quiet, civilized country, where there are no primeval forests, no mountains covered with eternal snow, an elderly assassin has recently eluded the pursuit of the entire police force for months. His whereabouts is constantly discovered, but owing to the connivance and assistance of the peasantry he constantly eludes his pursuers.

The above facts appear to me sufficiently to account

for the backward state of Corsica as regards its material development. It is the history of the Highlands of Scotland two hundred years ago—a people constantly fighting either against strangers or amongst themselves, and learning to look upon actual labour as derogatory. This is especially the case when the material wants of life are few, the population sparse, and the soil so naturally fertile as to develop, all but without trouble, the actual necessities of life.

At last, however, the very vigorous measures adopted by Government are beginning to tell thoroughly on the social state of the entire community, and security reigns where diffidence and alarm formerly existed. There can be no doubt, therefore, that the natural resources of Corsica will speedily be developed. The forests of Corsica contain timber as valuable as that which is imported into Europe from countries thousands of miles away; its wines are good, abundant, and cheap; its mineral wealth is said to be great—lead, copper, and iron being found, I was told, in abundance, and with little labour. The island is encircled by good roads, and regular and frequent steam communication exists between its principal ports—Bastia, Calvi, and Ajaccio, and the French and Italian mainland. Capital and enterprise are alone wanted, and they are sure to make their appearance.

Were Corsica an English possession, a dozen com-

panies would be at work in a few months ; but commercial enterprise is slower in France. The French still look upon Corsica as a semi-barbarous country. The officials who hold appointments there consider themselves banished, and ever aspire after the time when they can return to France, to Paris. Scarcely any travellers, either French or others, visit the island except on business. So much is this the case, that the advent of myself and companions was a matter of surprise and curiosity. What could possibly have led us there, was the question. Indeed, to explain my presence, I was invested with "a mission to examine the climate and productions of Corsica."

This isolation will, however, I am persuaded, soon cease ; and I shall be greatly pleased, if I am the means, by this brief notice, of directing the attention of some of my countrymen to this beautiful island. In no part of Europe can a few weeks be spent more pleasantly in spring by the healthy tourist than in Corsica. In early autumn malaria is, perhaps, too prevalent for pleasant and safe travelling. It may, with the greatest ease, be visited on the way to Italy, or on the return from the north of Italy. Two or three steamers run weekly between Bastia and Leghorn, in five or six hours ; a short and generally calm passage. One steamer runs weekly to and from Marseilles from each of the larger ports—Bastia, Calvi, and Ajaccio. I am told also that

a mail-steamer will be established this autumn between Nice and Corsica. If so, the passage from Nice will only be some eight or nine hours.

To the invalid, also, Corsica offers resources still unknown. I believe I may say that the principal object of my journey was successfully carried out, for I have actually discovered an admirable and a most lovely winter station, Ajaccio. I feel quite proud of this achievement, for I had divined it on geological, meteorological, and geographical grounds, before I started on the journey.

Ajaccio (population 14,000) is unquestionably one of the most lovely spots in Europe. It is one of the cleanest and most smiling little French towns I have ever seen. Not being cramped in by walls, it has spread itself out on the north-west side of a noble and picturesque bay, directed due south. At a distance of some twenty miles from the shores of this bay is seen a semicircle of the majestic granitic mountains, from six to nine thousand feet high; some of which, as we have seen, are capped with snow even in summer. The bay itself is as blue and as beautiful as that of Naples, although on a smaller scale. The town is well protected from the north-west by a spur descending to the sea from the principal range.

The vegetation of Ajaccio and the neighbourhood indicates a climate at least as warm as that of Nice,

perhaps even a shade warmer. The olive, the orange, the prickly pear, thrive with great luxuriance. In the principal street there is a double row of good-sized orange trees planted out in the soil, the effect of which is charming. They were in flower when I was there at the latter end of April, and embalmed the air. The lemon tree grows also, and bears fruit out of doors, but only, as at Nice, in sheltered and protected spots. It is evident that there are no prevailing winds felt, for the trees on the shores of the bay, east, west, and north, and in the neighbourhood of the town, grow perfectly straight. On other points of the coast, at Isola Rossa for instance, the trees near the shore were turned north-east, indicating the prevalence of south-westerly winds.

The principal medical practitioner of Ajaccio, Dr. Versini, a well-informed old gentleman of seventy-five, and his son, who practises with him, both assured me that the climate was unexceptionally healthy. The only epidemic disease they suffered from was intermittent fever in the latter part of the summer and early autumn, and that not in a severe form. Its attacks occurred principally when the wind blew from the mouth of two rivers that empty themselves into the bay on its eastern shore. They told me that cold was unknown during the winter, and that the weather was all but constantly fine and sunshiny. Their statement was confirmed by General Sebastiani, brother of the late marshal, one of

the few surviving companions of Napoleon, a Corsican like him. The general has a residence at Ajaccio, and has spent the winter there for many years. He told me that he had tried nearly every famed winter climate in Europe, but had found none equal to that of Ajaccio, and had consequently adopted it as a winter residence. I found him full of life and vigour, notwithstanding his advanced age, and a very agreeable companion. He showed me over a large well laid-out garden, which climbs the hill-side behind his residence, in the middle of the principal street. The general has had the good sense to plant it principally with the shrubs and plants of the country, which makes it exceedingly interesting. With the attention given to them they are all thriving luxuriantly, and a stranger is thereby enabled to compare cultivated with wild nature.

A large portion of the surface of Corsica—I may say all that is not a primeval forest or under cultivation—is covered with what they call “maquis.” I do not like to use the word brushwood or scrub, for such are very common terms to apply to groves of underwood composed of myrtle, arbutus, eystus, rock-roses, and Mediterranean heath, and yet of such is the interminable “maquis” composed. These choice shrubs are the weeds of Corsica, growing wherever nature is left to herself, and the soil is not covered with timber. In the northern part of Corsica I found everywhere

flowering luxuriantly a very lovely purple cyclamen. In the Castagneecia it was quite a weed.

Through the kindness of my friend Dr. Piccioni, I was introduced to several families at Ajaccio, and their warm and cordial reception of me and of my companions, rendered our few days' residence there additionally agreeable. Amongst them I may mention M. Pozzo di Borgo, M. Louis Blane's uncle, and M. and Mde. Levy, to whom we were more especially indebted. I found every one aware of the exceptional character of the winter climate of Corsica, and anxious that it should become known to strangers. The town council of Ajaccio has several improvements in view. A public garden, in a direct line with the principal street, in a most lovely site, is actually in progress.

There is a beautiful drive on each side of the bay, extending for some miles, which is also being improved and extended. It is likewise in contemplation to build a series of separate villas in the immediate vicinity of the public garden, for the accommodation of strangers. There is already one, a perfect little palace, built by a late "receiver-general" for his own use, which was to let when I was there.

Even now, however, strangers would have no difficulty in finding accommodation in the town, which offers considerable resources. There are two hotels, neither very clean nor very good, but where strangers

might remain until fixed elsewhere. There are always unfurnished apartments to be obtained at a reasonable rate; the price being, I was told, at the rate of about thirty francs for each room for the year. The plan for a stranger would be to take an unfurnished apartment, and to hire furniture from one of the numerous upholsterers. Fish is abundant, so is beef, veal, fowls, and game, but not mutton. Butter would probably have to be sent for weekly from Marscilles. What we had was very bad.

At Ajaccio there is a nucleus of very good society, both Corsican and French. There is the *préfet*, the judges and magistrates, the officers of the garrison, the leading engineers, and the resident native families. All appeared to me most amicably and cordially disposed to strangers. To crown the whole, there is a very tolerable Italian opera company throughout the winter season, and the subscription for one of the best boxes, holding six, is only about eight or ten pounds. I was, indeed, so much pleased with Ajaccio, that had I not made a settlement at Mentone, I should have certainly gone there next winter.

A great and mysterious charm about this lovely little southern town is its having been the birthplace of Napoleon. It was here also that he spent his childhood and his early youth, until, at the age of fifteen, he entered the Military School of Brienne. As I have

stated, he returned yearly to Ajaccio to spend the vacations in the bosom of his family, and was mixed up with all their feuds and Corsican feelings until fairly launched in his great military career. Then leisure ceased for the great man. His mind was ever full of ambitious and grandiose plans, his time and thoughts ever engrossed by their fulfilment. His quiet little native town and his Corsican nationality passed into the background, only to be fully remembered when chained to another island—the ocean rock of St. Helena. His family followed his wonderful fortunes—his brothers to become kings, his sisters to marry princes.

Our first visit the day after we arrived at Ajaccio was to the house of the Napoleon family, in which the great man was born. It is a good-sized, comfortable house, situated in the very centre of the town, looking out on a small court or garden, and so surrounded by taller houses, that there is no view of the sea or mountains from any of the windows. Its size and position show what we know to be the case—that Napoleon's family must have been one of the leading families of Ajaccio. The house has been restored by the present emperor, the old family furniture has been sought out and brought back, and everything has been replaced as much as possible in the same position as when the rooms were occupied by the Bonaparte family in former days. Thus every article of furniture and decoration

is a souvenir. The bed in which Napoleon was born is seen in a room on the ground-floor, as also the room and bed he occupied during vacation visits to his home when grown up. The house is shown by an old female servant of the family, who knew and attended Madame Letitia, Napoleon's mother, up to the time of her death.

Ajaaccio is full of the memory of Napoleon. As I sauntered through its quiet, sunny streets, with the beautiful bay and mountains generally in view, I could not help thinking that for years his steps had trodden the same ground, as a wild, impulsive child, and as a restless, ambitious youth. The contemplation of the grand natural beauties that surrounded him, and the constant brooding over the history and misfortunes of his native country, no doubt contributed to build up the rugged, indomitable character that he afterwards showed.

The present emperor, and especially his cousin Louis Napoleon, show strong Corsican sympathies. The latter has an estate near Calvi, which he frequently visits for shooting. Under their auspices, the town of Ajaaccio is beginning to show that it is the birthplace of the present imperial dynasty. A very chaste and beautiful marble chapel has recently been built as the mausoleum of several members of the imperial family. A museum and picture gallery is also nearly finished,

and will be a fine monumental building when completed. In it I saw, finally arranged, a large gallery of paintings left to Ajaccio by Cardinal Fesch, which had long been stowed away in lumber rooms.

The names of the streets and squares are essentially Napoleonic, being mostly derived from some member of the imperial family. In the market-place, behind a handsome stone fountain, is an allegorical statue, said to be meant for Napoleon. One side of this market-place, which looks on the bay or gulf, is bounded by a solid granite quay, that enables small vessels to moor close to land. This market-place is flanked by tall, well-built houses on one side, and by the town-hall on the other—a very respectable structure. On each side is a double row of handsome plane trees. The view of the blue bay, with its hemicycle of grand mountains in the distance, is indescribably beautiful from this point. This magnificent bay is protected from all winds but the south-west, and in its western or upper region there is a mole or jetty which gives the requisite protection even against this wind. More important works, however, are required and in contemplation. The Ajaccio bay might be made, and probably will be made eventually, one of the finest and most sheltered ports in the Mediterranean.

Ajaccio is the only town of Corsica that appeared to me thoroughly eligible as a winter residence. Per-

haps I may except Bastia; but I do not think Bastia is without objections. The climate is evidently exceptionally warm; for the valleys of Cap Corso, in the immediate vicinity of the town, contain orange and lemon trees; the hill-sides are covered with large olive trees, and the lycopodium grows in all moist situations. But Bastia must be exposed, from its situation, both to south-east and north-east winds. Even the south-west wind blows here with great fury at times during the winter, passing over the mountain ridge that separates Bastia from the Gulf of St. Florent, fifteen hundred feet high, and falling on the eastern side with such violence as to cut off the heads of cereals, to carry off the roofs of houses, and to confine the inhabitants of the town to their houses. Then there is a small, tideless port, which is so closed in that the water has become nearly putrid, and no part of the town in its vicinity would be eligible.

There is, however, a row of new, handsome houses on the principal "Place" facing the sea, which would constitute a very eligible residence if accommodation in them could be obtained, which I doubt, as they are all occupied by the leading Bastia families. The view of the sea from these houses is very beautiful, with the three mountain islands of Elba, Capraja, and Monte Cristo rising out of the waters at a distance.

There is a small but clean and comfortable hotel—

the Hôtel des Empereurs—on the Grande Place, certainly the best in Bastia. The only drawback is the proximity to the barracks and the noise of the drums.

The drive along the road at the bottom of the Cap Corso mountain chain, which extends for some twelve miles from the town, is very lovely. On one side the blue Mediterranean, on the other the mountain, the gentle slopes of which are covered with olive trees. Every few miles a ravine opens out, and in the upper part of this ravine, luxuriantly fertile, is always seen a village, enlivening the sides of the mountain with its church and its white houses grouped around the former. Each of these villages has its marina, or little port, on the shore. About two miles from Bastia, on this road, is one of the most interesting limestone stalactite caverns in existence—that of Brando. It may be recommended to visitors as an agreeable excursion.

The mountain of Cap Corso and its ravines have even a local reputation for their wines. My friends at Bastia repeatedly excited my envy by the choice specimens of these unknown wines that they offered me. Of late years but little has been made, owing to the ravages of the oïdium, which the Corsicans have not yet learnt to conquer.

In the southern regions of Corsica the oïdium is still unknown, and perhaps the best wine of Corsica is still made there in considerable quantity, the Vin de Tal-

lano. This wine is made in the vicinity of Sartene, and is really good and choiee. It resembles a full-bodied Burgundy, although it has a peculiar rich flavour of its own. Good old wine of this description, I was told, can be bought in the eask at Sartene for about sixpence the bottle, or even less.

On the north-eastern slope of Cap Corso, near the village of Pino, is a solitary tower to which tradition gives the name of Senecæ's Tower. This Roman philosopher, subsequently the master of the infamous Nero, was exiled to Corsica by Claudius, and passed eight years in the island. Senecæ, although a stoic, did not bear his banishment with fortitude. He has left records of his sojourn in Corsica in the shape of anathemas against the "wild and barbarous land" to which he was exiled, and of fawning supplications to his imperial master to restore him to favour. He seems to have had little power of appreciating the splendid scenery and the beautiful climate in which he passed these years of exile. His thoughts were ever on the blandishments of imperial Rome, to which he eventually returned, to become the master of Nero. There the stoic became a court favourite, and amassed a large fortune in a few years. Then he had not only to surrender his newly-acquired riches, but life, to his tiger pupil. He had better have remained an exile even in the lonely tower in abhorred Corsica.

There is at Bastia—a most important fact for travellers—a thoroughly well-informed and experienced medical practitioner, Dr. Manfredi, the surgeon of the civil hospital. He is a skilful operator, and occupies, I believe, a leading position as such in Corsica. The all but uniform success that, according to my surgical informants, attends surgical practice at Bastia and elsewhere, speaks greatly for the general healthiness of the climate, as well as for their skill.

Dr. Manfredi was educated in Paris, and has now been practising as an operating surgeon in Corsica for twenty years. The difference between surgery in Paris and surgery in Corsica was, he told me, perfectly marvellous. Nearly all surgical wounds heal at once by first intention, and purulent absorption is all but unknown. He had had eighteen cases of lithotomy, and had been successful in all. Indeed, he said he had such reliance on surgical cases doing well, that there was no operation in surgery that he should hesitate to attempt. On hearing this statement, I concluded that it is all but worth while going to Corsica expressly to be operated on, in case of dire need.

About thirty miles south of Bastia, in the midst of the Castagneccia, or chestnut country, in the centre of a highland region formed by spurs of the limestone chain of mountains, is a mineral spring called Orezza, the waters of which are renowned all over Europe. It

is a strong ehalybeate, loaded with carbonic acid. This spring is of inestimable value in a country like Corsica, in which the principal disease the inhabitants have to contend with is "malaria fever," or intermittent fever, in its more aggravated forms.

Dr. Manfredi kindly took me with him to visit the spring and this part of the island, and our excursion proved most interesting. The village of Orezza, or the greater part of it, is the doctor's patrimonial estate, and he possesses there a manorial fortified house, which I inhabited during our stay, and which I examined with much interest. The outer walls are of great thickness, composed of massive stones simply superposed, and they bear the trace of the strife of past days, bullet marks and smoke. During the hundreds of years that it has been inhabited by the ancestors of Dr. Manfredi, it has many times been attacked and besieged, and repeated but vain attempts have been made to destroy it by fire. The village is situated two thousand feet above the sea, and five hundred above the mineral spring. From the terrace before Dr. Manfredi's house, I counted twenty villages perched on the summit of as many hills, all in situations capable of being defended.

Orezza is one of the regions that was never conquered by Corsica's foreign foes. Surrounded by mountains in every direction, the sides of which are

covered with magnificent and very productive chestnut trees, it has always maintained a numerous warlike, patriotic, freedom-loving, and very idle population, delighting in the noble art of war. It is in the Terra delle Commune of the Corsican historians. It was by the sons of this district, principally, that the last battles for freedom were fought against the Genoese, and latterly, against their allies, the French.

The priest, or *curé*, and the mayor of the village dined with us. I was charmed by their simple cordial manner, and surprised by their knowledge of the political history of Europe, and by the great interest they took in everything that was English. This I found from my host, was to be explained by the incidents that occurred a hundred years ago. As I have already stated, during the last struggle of the Corsicans, under their glorious chieftain Paoli, from 1794 to 1796, they had the warm sympathy and partial support of England. Thence, in this region, the last to succumb to French rule, then considered a foreign tyranny, there still lingers a grateful remembrance of England, and of the support she gave in their extremity; although that support was scanty and inefficient. England had then many foes to contend with, and other duties; so that, although the nation enthusiastically responded to the call of the heroic Corsicans, yet but little active support could be afforded. Several members of my host's

family, friends of Paoli, held commissions in the English service after the annexation of their country to Corsica.

The mineral spring issues in great abundance from a circular well in the centre of an open building on a small mountain terrace, planted with trees as a promenade. It sparkles like champagne on reaching the surface, and is pleasant to the taste. A number of men and women were bottling it, and packing the bottles in cases for exportation to the continent, where there is a large sale. This chalybeate, Dr. Manfredi told me, combined with the pure mountain air, is a perfect panacea for the anemic condition which accompanies and follows severe attacks of intermittent fever. Thus, said he, Providence has placed the antidote near the disease. It is also most valuable in cases of chlorosis, debility, or anemia, from whatever cause.

Many of the upper classes from Bastia and the north-east of Corsica pass the hot summer months here; partly to take the waters of Orezza on health grounds, and partly to escape the great heat of the shore region. They locate themselves, in a primitive fashion, at the houses of the wealthier peasants in the numerous mountain villages. At an elevation of from two to three thousand feet the nights are always cool, and the days, although warm, are said to pass pleasantly under the cool shade of the chestnut-trees.

To those of our countrymen who wish to spend the summer in Italy, I think the mountain retreat of Orezza might offer a valuable resource.

Awaking early the morning after my arrival at Dr. Manfredi's hospitable mountain home, and looking out, I saw quite a crowd of peasant men and women, dressed in their Sunday best, perambulating the terrace beneath my window. On inquiring of a member of my host's family the meaning of the assemblage, I was told that they were peasants who had heard of the doctor's arrival, and were come to consult him. When he came in for breakfast, I found that he had been busy since six o'clock ministering to their wants; "a few words of advice or consolation," he said, "was all they required. Although anxious and delighted to be of use, the extreme confidence of his fellow countrymen was," he said, "a sad hardship. As soon as his arrival at Orezza became known, they always flocked in from the surrounding villages in such numbers, as positively to besiege the house, and to drive him back to Bastia in despair." The key, however, to this friendly persecution, was evidently the kind philanthropic spirit and the great local reputation of Dr. Manfredi.

As we returned home we were repeatedly stopped by "patients" waiting for us on the road-side enamelled with purple eyelamen and white asphodel. They had heard that the doctor had been seen on his way to

Orezza, and were waiting his return. One case I well recollect. A poor, thin, pale-faced young man was sitting on a chair, on the road-side, with several relatives around him: signs were made to us to stop, and the case was forthwith investigated. The patient held up to our notice a knee swollen to three or four times its natural size, and bearing the evidence of woful disorganization in the joint. Dr. Manfredi shook his head, and said to him, "My poor friend, all treatment would be unavailing; to save your life the limb must come off. Come to my hospital, and you shall have a bed." The poor fellow's white lips quivered, and he merely answered, "I will come." We then ascended our light carriage, and left him sitting on his chair in the road, and surrounded by his sympathizing relatives. Throughout this journey I felt that my friend's position and mission in remote Corsica was a very glorious one—one that bore with it its own reward, and made up for many of the anxieties and heartaches that are inseparable from our arduous career.

We stopped to breakfast at a road-side inn, where we were very cordially received, more as friends than as paying guests. Here we had more patients to see, both before and after our repast. As we were sitting down, a thin, wild-looking, dark-complexioned man, of about thirty-five, came in, and was introduced to me as a brother practitioner. I afterwards learnt that he was a

member of some Italian medical college, and that he practised in the neighbouring villages. His coat was old and threadbare, his shirt had not been changed for many days, and his hands spoke not of daily ablutions ; and yet there was something in him that bespoke a refined, cultivated, intellectual nature.

Whilst Dr. Manfredi was seeing his patients, my new acquaintance and I sat down on a log on the roadside, and discoursed of many things. I found his medical ideas often wild and visionary in theory, but practically he appeared to have gained considerable experience of disease. Then he revealed himself to me as a poet frantically fond of Corsica, his native country, and full of patriotic and poetic fancies about its mountains, its valleys, its climate, and the highlanders his countrymen. Half-an-hour passed rapidly, and I was sorry to take leave of the wild, poetic Corsican village doctor.

I have often thought of him since, so full of mental refinement, of classical and poetical conceits, and yet spending his days and nights for a bare maintenance in ministering to the poor ignorant peasants around him. I have seen some charming little poems written by him, full of sentiment and pathos. Perhaps, however, he is happier surrounded by the majestic scenery of his native country, which he can so well appreciate, and in possession of the affection and confidence of his simple

patients, than many a great city doctor in other countries.

On our route to and from Bastia, we passed along the salt-water pond of Biguglia, through one of the most malarious regions. At that time, the latter end of April, there was no malaria whatever. The country was covered with grass and green crops ; it looked, indeed, so smiling and pretty, so much like flat healthy meadow land in England, that it was really difficult to believe that this very region could be one of the pestilential spots from which every one flies in autumn. And yet such is the case ; even a passing traveller might all but have guessed that the country was insalubrious, from the complete absence of farms and villages.

On the mountain side, however, to the west, away from the shore, were numerous villages, all at an elevation of one thousand or fifteen hundred feet above the sea-level. They were thus invariably built, I was told, to secure the inhabitants from malaria. The owners of the alluvial shore-plains who reside in them, descend in the morning to cultivate the soil, and then return at night.

The principal agricultural operations in this district, from Bastia to Bonifazio, are carried on by an emigration of Luechese from the continent. They arrive in November, till the soil during the winter months, when malaria is dormant, and return to their own

mountains in April. They reach their native villages with a few pounds in their pocket, the result of the winter's labour; but also often with the seeds of fatal disease. The crops are reaped in June, and then the malarious plains are deserted, left to nature, until the cold weather of autumn has rendered them safe, or at least partly so. The Corsican summer sun is so fierce, that wherever water stagnates, even when deep in the soil and not perceptible to the eye, it appears to produce those changes in vegetation that are followed by malaria.

More to the south there are plains such as those of Aleria, a Roman colony and town in former days, which are even more deadly than that of Biguglia. The wind passing over these regions carries malaria fever wherever it reaches. Thus, although Corte is in the middle of the mountains, fifteen hundred feet above the level of the sea, and merely traversed by a brawling mountain torrent, I found that malaria fever was rife there. Dr. Tedeschi, the leading medical practitioner at Corte, told me that he thought the fever was constantly developed in Corsica by a mere chill, quite independently of any malarious influence. He said that every year he was called to attend very severe cases, merely brought on by chills experienced from sitting out in the evening under the shade of a row of plane-trees, in the centre of the town, away from all water. I found the same

opinion prevalent among the medical men both of Bastia and Ajaccio.

On examining the country, however, I ascertained that the river that passes through Corte, the Tavignano, although having its origin in the granitic mountains, traverses a cleft or valley in the limestone range, and reaches the eastern sea by crossing the deadly Aleria plains. The south-east wind or sirocco, therefore, a very frequent one here, must drive the Aleria malarious air up the valley, as through a funnel, as high as Corte. In that case the entire community would be exposed to its influence, and the "chill" might be merely the "occasional" cause in a constitution already predisposed by malaria. Certainly, in Surrey and Middlesex, where we have no malarious air, a sudden chill does not bring on severe ague, but bronchitis, pleurisy, or rheumatism.

Corte is historically interesting ; for, not being exposed to attack, like the shore towns in olden times, it became the patriotic capital of Corsica. It struck me, however, as the least picturesque that I saw in the country. There is an old historical castle worth visiting, a college founded by Paoli, and some very picturesque excursions in the environs. In the neighbourhood, at Ponte Leccia, are some promising copper mines, worked by Messrs. Petruzzi and Raymond, for which further capital is required. These gentlemen tell me that the

mines were getting into good working order, and would certainly prove a very valuable speculation. Indeed, Corsica offers a wide field near home to the speculative. Its mines, its forests, and its wines are all, no doubt, capable of being worked with great advantage.

Isola Rossa, or Ile Rousse, is a small modern town, founded by Paoli in the latter part of last century, with a good port, and weekly steam communication with Marseilles. The coast and country are picturesque, but there is no accommodation for strangers, except the little inn. Moreover, the south-westerly winds must be trying, if we may judge by the trees on the shore. The beans and rye were ripe on the 25th of April, and the planes were in full leaf. There is one very handsome modern house here, like a quadrangular castle of the olden time, belonging to M. Piccioni, the brother of my friend at Bastia. From him, too, I received great attention. I found him very busy with a lead-mine which he had discovered on his property, and which he clearly thought would eventually prove very valuable.

Calvi is an old town, further south, for centuries occupied by the Genocse, to whom it ever remained faithful. Its motto, "Semper Fidelis," may be still seen on the gate. It occupies a high promontory, which forms one side of a very fine and safe bay. The upper part of the town is a mass of ruins, and has been so ever since it was bombarded by Nelson in 1794.

It is quite singular to walk through the streets among the falling walls of houses, some merely shattered, some partly burnt, as if by a bombardment of yesterday only. Below these shell-and-cannon devastated houses are those occupied by the modern town.

Across the small bay is a semicircular plain, a few miles only in depth, and bounded by a semicircle of glorious snow-capped granitic mountains. The view from the ramparts of Calvi is perfectly magnificent. From the sides of these mountains run several torrents or rivers, which have, as usual, converted the alluvial plain into a fever-breeding district. Hence the extreme unhealthiness of Calvi. Whenever the wind blows from the east, the inhabitants receive the malarious emanations from the soil. The plain is covered with the ever-present maquis, myrtle, eystus, heath, arbutus, and lentiscus, and looks as innocent as possible. To render it really so, the torrents would have to be embanked, and the soil drained and cultivated. Wherever this is done malaria disappears, even in Corsica. M. Piecioni, of Isola Rossa, has recently purchased a considerable tract of this land, and is draining and cultivating it, as a lesson to his fellow-countrymen at Calvi. The land thus cleared, drained, and cultivated, is turning out most productive, and this philanthropic lesson will eventually prove a most profitable investment.

One of the objects of my visit to Corsica, as elsewhere stated, was to find a perfectly cool summer station for the English consumptive invalids who wish to pass the summer abroad. I found stations such as Orezza, and the baths of Guagno, near Ajaccio, which would do very well for healthy persons, anxious to escape from the extreme heat of southern Europe during the summer months. But these localities are not, in my opinion, sufficiently high and cool to be chosen as summer retreats by the consumptive. The latter, as I have elsewhere stated, ought, if possible, to keep in a dry temperature, between 60° and 68° Fahr. The Corsicans do not feel the want of such a summer temperature, and have consequently made no effort to find it.

On crossing over the granite chain, from Corte to Ajaccio, we came to a spot, between Vivario and Boeognano, the most elevated that was passed, which would no doubt do admirably for such a summer sanitarium. We were probably between four and five thousand feet high, and had left the maritime pines and the chestnuts far below us; the trees had become English trees—beech, birch, and larch. The air was cool and pleasant, the sky clear, the mountains very beautiful; but there was only a small, dirty, roadside inn. No doubt the Ajaccians would shudder at the idea of spending their summer in so cool a locality.

A long way down, on the western slope, we found

one of their favourite hot-weather retreats, Bocognano. It is a chestnut country village, like Orezza, and assuredly a very hot place, for we were half roasted in April, during the hour we remained for breakfast. It is true the chestnut-trees were not yet in full leaf, and gave no shade.

The baths of Guagno, about twenty miles north-east of Ajaccio, are greatly renowned in Corsica. The waters are sulphurous, and much frequented in summer. It is to the fashionable world of Ajaccio what Orezza is to that of Bastia. Guagno is prettily situated, and is in the immediate vicinity of one of the largest and grandest of the primeval forests of Corsica, that between Vico and Evisa.

At the former place, Vieo, the ladies of our party were most hospitably received by a Corsican gentleman and his family. A picnic excursion to the forest was proposed and accepted, and one of our companions, a perfect equestrian, greatly surprised the escort, composed of some score or two of Corsican gentlemen. Mounted on a strong mountain pony, she valiantly took the lead, and kept it throughout a ride of more than thirty miles, there and back, over hill and dale, up and down precipitous roads frightful to look at. Our brave and much-admired young countrywoman returned, I am happy to say, in triumph, safe and sound. This is more than can be said of all her followers, for

some awkward tumbles took place among them ; but, fortunately, they were unattended with any serious consequences.

The southern regions of Corsica, both on the west and east side of the central mountain ranges, are much more wild, more uncultivated, and more sparsely inhabited, than the northern. There is only one town or village of any importance between Ajaccio and Bonifazio, viz., Sartene. Both Sartene and Bonifazio are worth visiting, but I was not able, for want of time, to extend my journey so far.

Sartene is a small inland Corsican town, like Corte, connected with the mountain region, and in olden times mostly in the hands of the national party. It is still inhabited by some of the oldest Corsican families. Bonifazio, overhanging the straits between Corsica and Sardinia, was one of the fortified ports, like Bastia and Calvi, that the Genoese occupied for centuries, and bears many traces of their past dominion.

In the great primeval forests are to be found wild boars and small game in abundance. In the higher mountains the native race of wild sheep, called moutons, are met with. Their presence in the mountains is a strong attraction to enthusiastic sportsmen.

In the alluvial plains on the eastern coast game abounds, and in the autumn and winter all kinds of water-fowl are met with in profusion. In the autumn

season, however, these latter districts are so unhealthy, that the pursuit of the game would probably be followed by severe fever. Moreover, under the exceptional social condition which reigns in Corsica, sporting is all but impossible, as it is illegal to carry a gun. A stranger would, no doubt, easily obtain permission from the authorities to shoot in a given district for a stated time, but he must not be offended if one or more gendarmes were drafted off to accompany him instead of "keepers." Game, large and small, is most abundant, I was told, in the southern and eastern parts of Corsica, because they are the wildest and most thinly inhabited.

The prohibition of firearms, and consequently of legitimate sport, has not tended to increase the stock of game in the neighbourhood of the towns and in the more populous parts of the island, but rather the reverse. Not being able to shoot game as heretofore, the entire agricultural population have devoted their energies to trapping it, and, according to report, with such success as to have sensibly diminished its numbers.

Such I found Corsica. To me and to my companions, the tour proved a most enjoyable and fascinating one, although our time was limited, and we were obliged to move more rapidly than we could have wished. I trust that the description I have given will

lead many to visit its shores. I also hope that, short as my visit was, by making known the beautiful little town of Ajaccio, it may be the means of adding another easily accessible winter sanitarium to those we already possess.

I would recommend all who feel disposed to make a tour in Corsica to read carefully Gregorovius' "Wanderings in Corsica, its History and its Heroes." As I have stated, it is a most charming book, even for tarry-at-home travellers. They should also write to M. Fabiani, libraire, at Bastia, for the Map of Corsica contained in the Atlas départemental de la France, and for Marmocchi's "Abrégé de la Géographie de la Corse." Thus prepared, they will be sure to gain both pleasure and information from their excursion.

Those who are afraid of the sea can both go and return by Leghorn and Bastia. Corsica and Sardinia act as a western breakwater to the coast of Italy, so that the channel between the islands and Italy is a much calmer sea than the more open space between Ajaccio and Marseilles. In the spring months of April, May, and June, this part of the Mediterranean is often calm for weeks together. I should advise no one to go to Corsica in the autumn, on account of the malaria which then prevails in many parts (such as Calvi) which the traveller is desirous to visit.

The steamer from Genoa to Bastia leaves Genoa every Friday at 6 P.M., returns Wednesday at 8 A.M.; the steamer from Marseilles to Ajaccio leaves every Friday at 9 A.M., returns Tuesday at 12; that to Calvi leaves Marseilles every Tuesday at 9 A.M., returns Saturday at 12 A.M.; that from Marseilles to Bastia leaves Marseilles every Sunday at 9 A.M., returns Thursday at 9 A.M.

It is worthy of remark that all the Italian towns, indeed all southern towns, are more healthy, and consequently safer to visit, in spring than in autumn. In spring they have gone through the winter rains and frosts, which have cleansed and purified them. Thus, Rome and Naples may be visited much more safely by pleasure tourists in February, March, and April, than in November, December, and January.

The south of Europe, also, is everywhere much more beautiful in spring than in autumn. In April and May, all that has been written by the poets is really found to be true. We may then without reserve surrender our minds to the enjoyment of the "poetic" beauties of spring, which we can so seldom do in our own northern country.

CHAPTER IX.

BIARRITZ.

AS AN AUTUMN AND WINTER RESIDENCE.

DURING the last few years, several of my friends and patients have spent the winter at Biarritz, and they describe the climate as very enjoyable, mild, and generally fine.

The latitude of Biarritz is the same as that of Pau, 43° ; that is, seven degrees more south than Torquay. This situation necessarily implies a much warmer winter climate. Indeed, although I have but few thermometrical data on the subject, I presume that the winter temperature of Biarritz must be pretty nearly the same as that of Pau, with perhaps a slight difference in its favour owing to the vicinity of the ocean.

As we have seen, the proximity of the sea always renders the temperature of a locality milder and more equable. The existence, also, of an extensive tract of dry sand, such as constitutes the Landes, extending nearly two hundred miles, from Bordeaux to Bayonne, implies paucity of rain, the absence of that continued precipitation of moisture during the winter that cha-

racterizes the more northern sea-coast of France and England. We may positively deduce this fact from the arid dryness of the sandy plains of the Landes of France, whether it be that this part of France is still within the range of Maury's "rainless track," or that the mountains of north-western Spain arrest and precipitate the moisture brought by the south-westerly Atlantic winds.

Biarritz has hitherto only been noticed by writers on climate as a favourite summer and autumn watering-place, but I believe, from the above facts, from the testimony of others, and from my own investigations, that it has also claims to being accepted among the eligible winter stations of the south. There are social reasons, also, that make it worthy of notice.

The presence of the imperial family in the autumn, and its own merits, are rapidly raising it to the position of one of the most frequented and most fashionable seaside watering-places in France; thence a great influx of sea-bathing visitors in summer and autumn. To provide for their wants, numerous hotels and houses have been built, and an active and extensive system of commissariat has been established.

Once the summer sea-bathing visitors are gone, the hotels and houses are all empty, and the supplies find no market. The result is, that in winter Biarritz is as cheap a place to live in as it is expensive in autumn

and summer. This state of things will probably long continue, for the summer development is certain to greatly outstrip the winter requirements, even were it to become a winter colony like Pau, Nice, and Mentone. To persons requiring a southern climate whose means are limited, and who are therefore obliged to consider every expense, this consideration may be one of primary importance.

It is impossible that a town situated on the boisterous bay of Biscay can be equal in point of climate to Pau or to the towns of the Riviera, or to my newly-discovered favourite, Ajaccio, in cases of severe disease, in which the very best climate that can be found is required. But still there must be many cases in which the sunshine, mild temperature, and comparative dryness of the south coast of France would suffice. Moreover, the question of expense may be, and unfortunately often is, a paramount consideration.

I have repeatedly visited Biarritz as a tourist, and a few years ago I spent a very enjoyable month there for sea-bathing, that of September. On my return, I put together a few notes of my residence, some of which I now reproduce with a view to give my readers an idea of what Biarritz is locally and socially.

Biarritz is picturesquely situated five miles south-west of Bayonne, at the bottom of the Bay of Biscay, a short distance only from the Spanish frontier. It has long

been resorted to by the inhabitants of Bayonne and of the Pyrenean district, in summer, for its excellent sea-bathing. It was, however, all but unknown to fame until the present Empress brought it into notice by making it her marine autumnal residence. Notwithstanding imperial patronage, the position of Biarritz is so secluded, and the distance from the French capital is so great—523 miles—that both its natural and medical advantages and capabilities are as yet but little known and appreciated.

The climate of Biarritz is modified by its geological as well as by its geographical position. From Bordeaux to Bayonne, a distance from north to south of nearly 200 miles, and penetrating inland to a considerable depth, extend the vast sandy plains to which the French give the name of Landes. This district, which has an area of 3700 square miles, is often called a desert, but, in reality, it is merely an immense moor, and is covered with pretty nearly the same vegetation as our own moorlands—viz., heather, ferns, gorse, and pines; only, the climate being very much warmer and drier than our own, the vegetation is much less luxuriant, more stunted and thinly scattered.

Indeed, the Landes of France may be said to occupy a medium position between the heather and fir-clad sandy moors of Surrey, for instance, and the arid sandy plains of Spain or of Africa, where a greater degree

of heat and dryness all but entirely destroys even the vegetable tribes that are peculiar to such soils. This sandy tract is of course remarkable for the warmth of its temperature, which in summer is intense. Although it ceases at the Adour, a river which passes through Bayonne, and which throws itself into the sea about two miles to the north of Biarritz, it exercises a considerable influence over the climate of the strip of land, some fifteen or twenty miles in depth, which extends from the Adour to the foot of the Pyrenees. Thus Biarritz, although out of the district of the Landes, participates to a certain extent in the summer heat and the winter mildness of that region of the Gaseony of former days.

The heat of summer is tempered at Biarritz by a sea-breeze which constantly blows inland during the day, and by its situation on a different geological substratum—viz., sandstone rocks. The Biarritz lighthouse is built on the first sandstone projection which appears south of the Adour, the coast of the Landes being formed by low ridges of sand. The village of Biarritz is situated around two small bays, themselves occupying the centre of the Bay of Biscay, formed on the north-east by the low coast of France, and on the south by the base of the Pyrenees and by the province of Biscay in Spain, into which the Pyrenees extend, rising tier over tier.

As the coast at Biarritz attains a considerable elevation, and the two small bays are strewn with large rocks, worked by the ceaseless action of the powerful Atlantic swell into every conceivable shape, the character of the scenery is highly picturesque. The coast with which I should feel the most inclined to compare it is that of Ilfracombe, in North Devon. It has not, it is true, the stern grandeur which the geological formation there imparts to that beautiful spot, but in some respects it is even more irregular and wild. The friable nature of the sandstone rocks offering less resistance to the action of the Atlantic, they are excavated and fretworked into every conceivable shape.

Until the end of September the weather was uniformly fine and dry; no rain falling except a little during the night, on two or three occasions. The sky was clear, generally cloudless, the sea blue, and the sun powerful, so much so as to render an umbrella all but indispensable between nine A.M. and five P.M., when walking in the sun. The wind varied between S.W., S., and S.E. When in the S.W., which was mostly the case, there was always a heavy sea rolling in from the Atlantic or rather from the Bay of Biscay. When in the S.E., which only occurred for a few days, the sea was much calmer. On one occasion, for forty-eight hours the wind was due south. During this time the heat was very oppressive, although the thermometer

only rose one or two degrees, from 74° or 75° to 76° . I was told that such was always the case in summer when the *Vent d'Espagne*, or south wind, reigned, and that it was feared like the sirocco on the Mediterranean coast, to which it was compared. The thermometer in a cool, shaded room varied from 70° at night to 72° , 74° , or 76° in the daytime, until the weather broke up on the 26th, when it descended to 70° early in the morning, and to 68° later in the day, at four P.M. The temperature of the sea-water I found generally to coincide with that of the morning atmosphere, in deep water, at some little distance from the shore.

The beach, as is usually the case on such coasts, is a firm, smooth sand, peculiarly adapted for bathing. There are three distinct sites for the purpose : the Côté du Moulin, the Côté des Basques, and the Port Vieux. The two former are rather exposed situations, on the sides of the small bays, and at both there is generally a considerable swell. The beach shelves gently, and the bathing is excellent ; but waves rolling in rapid succession have to be encountered, which to the weak and delicate is rather fatiguing, especially if the sea is rough.

The Port Vieux is a species of natural amphitheatre in the midst of the rocks, opening to the sea. In front of the open or stage part at less than a quarter of a mile distant, there are several huge rocks, which form a

natural breakwater. One of them, called the Grand Rocher, is so large that the sea only breaks completely over it in very rough weather. Thanks to the protection thus afforded, at low tide the sea in the Port Vieux is all but calm, and at high tide only agitated, in ordinary weather. The Port Vieux is the favourite resort both of the bathing and non-bathing visitors at Biarritz.

Around the concavity of the amphitheatre, facing the sea as the boxes of a theatre face the stage, are a number of small cabins, built on piles, about four feet from the ground. Those on the one side are devoted to the ladies, and those on the other to the gentlemen bathers. Their back entrances abut on the cliffs, which rise abruptly to a considerable elevation. On the beach, between the cabins and the sea,—in the pit, as it were,—are placed chairs, which are occupied in the morning by nursery-maids and children, and in the middle and latter part of the day by the most fashionable of the visitors, who congregate to chat in the continental way, and to look on the aquatic appearance and performances of their friends and acquaintances, and of the public generally.

Both ladies and gentlemen wear a “bathing costume.” With the former it consists of loose, black woollen drawers, which descend to the ankles, and of a black blouse or tunic, descending below the knees, and

fastened at the waist by a leathern girdle. On leaving their cabins, they put on also a wide waterproof cape, which they keep on until they reach the water's-edge, and which is then taken off by the bathing attendant. This costume, like all picturesque costumes, makes the young and the pretty look younger and prettier, but certainly does not set off to the same degree the more matronly of the lady bathers. All, however, young and old, seem totally indifferent on the subject, and pass smilingly before their friends and the spectators, appearing to enjoy every stage of the performance. Most ladies have an attendant, male or female, and many are, or speedily become, very tolerable swimmers. They are to be seen daily swimming, with or without assistance, at a considerable distance from the shore.

The gentlemen's dress is a kind of sailor's costume, and as custom gives them more latitude with respect to colour, material, and make, great varieties are observed. The exquisites of the place seem to take a pride in showing themselves off thus prepared for their marine gymnastics. I have often seen them, cap in hand, feet and ankles naked, talking to their lady friends sitting around, previous to taking their first plunge. Once in the water, all the bathers, male and female, mingle together; the timid remaining near the beach, and the bold and learned in the art of swimming striking out into deep water. The utmost decorum,

however, prevails. The husband assists his wife, the father his young daughters ; but strangers keep at a respectful distance in the water, as they would on dry land.

At first, this aquatic mingling of the bathers strikes the English beholder as an infringement of the laws of propriety and decorum, but a more close scrutiny brings the conviction that such is really not the case, —indeed, that this mode of bathing is infinitely more decorous and decent than that which is pursued on our own shores. The bathers are, to all intents and purposes, dressed ; and there is, in reality, no more impropriety in their witnessing each other's marine sports than there is in the members of a masquerade mingling in the streets during the carnival at Rome or Naples. I may add that, once in the water, a light woollen or cotton dress is not felt, and in no way interferes with liberty of movements and with the pleasure of bathing. Indeed, when bathing has to be carried on in so public a place, a light costume of this description is a great addition to one's comfort.

The natives of southern countries remain much longer in the water than we do, and often make their bathing consist of various stages of going in and out, resting between-times. This they can do with impunity, owing to the temperature of the water. When both the air and the sea are 74° or 76° Fahr., as was

the case during the greater part of my stay at Biarritz, bathing is an indescribable luxury, and the inducement to remain in for more than a plunge certainly is very great. I believe there is no danger in the moderate prolongation of the sea-bath, as long as no sensation of cold or chill is experienced.

The vegetation around Biarritz gives evidence of a southern climate, without, however, being as characteristically southern as that of Nice. Nice is pretty nearly in the same latitude, but is sheltered from the north by the maritime Alps. At "exposed" Biarritz the principal trees are planes, the principal product, Indian corn. The tamarix grows very luxuriantly, and becomes quite a large tree, some thirty or forty feet high; but there are no orange-trees, gigantic aloes, palms, or caper plants, as at Nice and along the Riviera. Ferns are very abundant in the lanes, of which there are many in the neighbourhood. They are paths, or cart-tracks, sunk a few feet below the level of the adjoining fields, and their banks are covered with ferns, mostly of the same species as those found in England. Heather grows freely also in sandy soils, and I noticed one or two kinds unknown to our moorlands.

On the whole, Biarritz is a very enjoyable sea-bathing station, and presents some peculiarities and advantages which will probably render it useful to medical practitioners, now it can be easily reached by railroad from

Paris to Bayonne, both as an autumn and winter resort. In summer the heat is, no doubt, greater than is agreeable to the natives of our isles, but in September and October the temperature is moderate, and suitable to the healthy. Those who cannot resort to our own coasts in July and August, and to whom a mild or warm temperature is essential, have thus the opportunity of still enjoying at Biarritz summer sea-bathing, at a time when with us both the sea-water and the external atmosphere are becoming chilly.

The village of Biarritz, like all French seaside villages and towns, is built away from the sea, behind the cliffs which form the bay. All French maritime populations endeavour to shelter their homes from the sea, which they seem to look upon as an enemy to be kept out of sight as much as possible. It is a straggling village, composed of two streets parallel to the cliffs. It contains no marine parades, no marine crescents, but a heterogeneous collection of houses of all sizes and shapes, with booths in the middle of the street, which give it the aspect of a fair. This appearance is kept up by the stream of people, many in Basque costumes, who pour in all day by the omnibuses from Bayonne, most of whom merely remain a few hours. In other respects, Biarritz is a very quiet place, notwithstanding its being the marine residence of the Empress.

The presence of the Imperial family seems to exercise great attraction over Spanish visitors, who are numerous. To the Empress, Biarritz is endeared by early associations, for she used to visit it in childhood. Moreover, it is a kind of neutral ground where she can meet, without being hampered with courtly etiquette, her Spanish relatives and friends.

The imperial residence, "the villa Eugénie," is a small, rather naked French chateau—a reduction of St. Cloud. It is constituted by three sides of a parallelogram, the base being turned towards the sea, and is situated on the beach, on a small terrace, partly artificial. From the drawing-room windows the view is truly marine; nothing is seen but the wide ocean, and some large rocks in the offing, against and over which the surge is constantly breaking. At high tide the sea bathes the foot of the terrace, and in rough weather the waves break over it, and cover the front of the house with their spray; so much so, indeed, that considerable damage is occasionally done, and gratings have been placed at the bottom of the windows to take off the sea-water which dashes against them.

Last winter (1861-2) there was an English clergyman, the Rev. Edward Crow, and an English physician at Biarritz, which may now be considered fairly started as a winter sanitarium. I believe that time will show it to be

worthy of the eulogium I have passed upon it. One advantage the residents at Biarritz certainly possess over us of the Mediterranean ; they have the rolling surges of the Atlantic, and the daily rise and fall of the vast Atlantic swell, and the tempestuous sea of the Bay of Biscay to contemplate.

In a communication recently received from the Rev. Mr. Crow, he tells me that in the month of January of the present year (1862), the average of his daily observations, made at 8 A.M. on a north wall, was about 45° Fah. The highest temperature during that month at the above hour was 62°, the lowest 30°. In February there was some very cold weather. During seven days the highest temperature was 34° (at 8 A.M.), the lowest 24°. With the exception of that week the weather was glorious, the thermometer after January varying from 48° to 62°.

These data are just what might be expected ; being situated in a southern region, on the margin of a vast tract of land in which, whatever the cause, less rain falls than further north. Biarritz must be mild, sunshiny, and dry in winter ; only, having no mountain protection whatever to the north, it must also be liable, like Pau, to spells of cold weather when the wind blows from the north. It has not behind it "the fire-screen" of the maritime Alps, nor has it the night radiation of the sun-warmed Riviera mountains.

These exceptional periods of cold weather at once explain the vegetation of the Biarritz plain. Severe night-frosts with a temperature of 24° once in a quarter of a century would destroy all the southern vegetation of the Riviera, the lemon, the orange, and the olive trees, the palms, the cacti, and the lycopodia.

There are, however, many forms of delicacy and of actual disease in which a few days of clear, cold, bracing weather would be by no means objectionable. Much more cold weather has to be encountered, no doubt, in our English sanatoria, Ventnor, Bournemouth, and Torquay, than would be met with at Biarritz during even an exceptional winter.

APPENDIX.

TABLE I.

—	NOVEMBER.		—	DECEMBER.			
	1860.			1859.		1860.	
	Min.	Max.		Min.	Max.	Min.	Max.
1	—	—	1	52	62	—	—
2	—	—	2	48	54	—	—
3	—	—	3	45	51	—	—
4	63	69	4	42	51	—	—
5	63	69	5	44	53	—	—
6	63	69	6	45	53	54	64
7	61	69	7	47	57	51	61
8	59	68	8	47	55	50	58
9	52	68	9	45	57	49	60
10	59	63	10	48	56	48	64
11	50	64	11	44	55	49	61
12	58	62	12	43	48	45	62
13	50	61	13	43	52	42	64
14	49	60	14	39	45	43	62
15	51	59	15	40	46	43	62
16	49	49	16	38	43	43	61
17	48	59	17	35	45	42	60
18	41	61	18	37	43	37	50
19	49	67	19	42	48	39	45
20	47	57	20	40	45	37	59
21	47	54	21	38	46	38	52
22	50	60	22	38	45	32	54
23	53	61	23	42	53	32	58
24	54	58	24	46	55	40	50
25	53	60	25	45	48	41	50
26	50	60	26	48	53	42	60
27	51	60	27	45	51	47	62
28	49	59	28	43	51	48	64
29	51	60	29	43	54	43	62
30	51	59	30	46	53	42	57
31	52	62	31	46	53	46	52
Media	47·5	55·7	Media	43·3	51·	44·5	58·6

TABLE I.—*continued.*

JANUARY.					FEBRUARY.				
1860.		1861.		—	1860.		1861.		
Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.	
1	46	53	40	51	1	41	51	50	54
2	48	57	42	52	2	43	51	45	53
3	50	57	42	53	3	37	45	42	52
4	52	58	42	49	4	38	45	44	53
5	52	60	42	52	5	36	45	45	52
6	51	57	44	51	6	38	49	45	54
7	47	53	42	50	7	40	51	48	53
8	43	51	40	56	8	40	51	45	55
9	43	49	47	58	9	37	51	43	50
10	43	52	47	58	10	42	52	42	53
11	48	53	46	52	11	43	51	46	52
12	48	52	46	52	12	41	50	45	50
13	43	50	44	49	13	38	48	39	50
14	43	51	42	50	14	39	50	41	51
15	46	54	42	52	15	38	52	44	52
16	43	51	41	52	16	39	52	46	51
17	42	53	40	50	17	42	50	44	52
18	45	53	39	51	18	39	50	46	53
19	45	53	40	52	19	39	52	42	52
20	47	50	39	51	20	38	50	45	55
21	45	51	45	52	21	37	49	50	57
22	45	53	45	51	22	42	52	51	59
23	44	48	42	51	23	40	50	49	58
24	40	50	46	56	24	40	52	50	56
25	43	49	47	55	25	42	53	50	57
26	40	50	45	53	26	42	52	47	58
27	40	49	46	52	27	42	60	40	59
28	42	51	46	53	28	43	56	49	58
29	41	51	45	52	29	44	57	—	—
30	41	48	45	54	30	—	—	—	—
31	42	52	46	55	31	—	—	—	—
Media	44.7	52.2	43.3	52.4	Media	40.	50.9	45.4	53.8

TABLE I.—*continued.*

MARCH.					APRIL.				
1860.		1861.		1860.		1861.			
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
1	47	57	45	56	1	54	62	47	62
2	50	57	47	57	2	47	60	47	65
3	46	57	47	56	3	50	60	46	59
4	45	58	45	56	4	50	56	48	64
5	44	62	46	57	5	52	63	51	62
6	44	55	45	55	6	53	64	50	64
7	43	59	45	56	7	59	73	53	64
8	43	48	45	57	8	55	68	52	64
9	39	42	45	56	9	55	66	51	63
10	37	47	45	57	10	50	64	46	64
11	37	47	45	59	11	54	58	46	60
12	39	49	46	57	12	50	64	49	64
13	40	44	49	58	13	49	62	51	68
14	42	54	48	59	14	50	62	54	69
15	43	48	47	60	15	47	63	54	69
16	45	52	41	54	16	53	60	—	—
17	44	54	42	56	17	54	64	—	—
18	43	55	42	59	18	55	65	—	—
19	45	61	43	60	19	54	62	—	—
20	46	62	42	59	20	49	56	—	—
21	45	59	42	63	21	40	54	—	—
22	47	60	52	60	22	43	56	—	—
23	48	59	47	64	23	45	56	—	—
24	46	59	47	63	24	—	—	—	—
25	53	62	50	65	25	—	—	—	—
26	47	57	48	64	26	—	—	—	—
27	46	62	49	64	27	—	—	—	—
28	48	63	52	62	28	—	—	—	—
29	49	62	52	60	29	—	—	—	—
30	49	62	52	62	30	—	—	—	—
31	52	62	47	58	31	—	—	—	—
Media	44.9	56.2	46.3	58.6	Media	50.0	61.8	49.2	54.

TABLE II.

Nile and Mentone compared. 1860.

—	JANUARY. FEBRUARY.				—	JANUARY. FEBRUARY.			
	Minimum.					Maximum.			
	Nile.	Ment.	Nile.	Ment.		Nile.	Ment.	Nile.	Ment.
1	38	46	44	41	1	67	53	73	51
2	39	48	43	43	2	65	57	74	51
3	42	50	47	37	3	65	57	83	45
4	45	52	49	38	4	73	58	85	45
5	44	52	44	36	5	76	60	80	45
6	39	51	42	38	6	75	57	85	49
7	40	47	50	40	7	77	53	67	51
8	39	43	48	40	8	75	51	66	51
9	43	43	50	37	9	82	49	68	51
10	45	43	40	42	10	70	52	64	52
11	44	48	38	43	11	69	53	75	51
12	41	48	43	41	12	75	52	77	50
13	43	43	44	38	13	76	50	80	48
14	43	43	43	39	14	79	51	81	50
15	44	46	42	38	15	66	54	84	52
16	43	43	50	39	16	70	51	86	52
17	51	42	50	42	17	77	53	88	50
18	49	45	55	39	18	73	53	90	50
19	44	45	40	39	19	67	53	66	52
20	45	47	40	38	20	73	50	70	50
21	45	45	50	37	21	73	51	74	49
22	45	45	45	42	22	76	53	77	52
23	51	44	50	40	23	75	48	74	50
24	50	40	40	40	24	75	50	79	52
25	50	43	40	42	25	78	49	80	53
26	51	40	49	42	26	82	50	74	52
27	48	40	48	42	27	75	49	65	50
28	46	42	40	43	28	71	51	65	56
29	45	41	49	44	29	76	51	66	57
30	51	41	—	—	30	75	48	—	—
31	42	42	—	—	31	82	52	—	—
Media	44·6	44·7	45·2	40·0	Media	72·8	52·2	75·7	50·9

TABLE III.

Mean Maximum Temperature in Shade.

	IN	
	JANUARY.	FEBRUARY.
Nile	72	75
Madeira	66	67
Malaga	58	58
Mentone	52	50 (1861 ... 53)

*M. de Brea's Monthly and Annual Media for Mentone
for Ten Years, from 1851 to 1860.*

January	48·2
February	48·5
March	52·
April	57·2
May	63·
June	70·
July	75·
August	75·
September	69·
October	64·
November	54·
December	49·
Annual	60·8

These data were obtained by observations made at 6 A.M., 2, and 10 P.M.

The maximum was 89°·6, the 3rd August, 1859. The minimum 32°, the 22nd January, 1855.

TABLE IV.

Showing how the Heat increases and decreases in England through the Year. (Drew's Meteorology.)

—	January.	Feb.	March.	April.	May.	June.
1	·037	·063	·170	·300	·537	·774
2	·033	·055	·166	·318	·555	·781
3	·033	·066	·162	·333	·570	·788
4	·029	·081	·162	·344	·585	·800
5	·022	·107	·166	·355	·596	·800
6	·018	·130	·170	·366	·613	·803
7	·011	·137	·170	·370	·607	·807
8	·001	·137	·170	·370	·603	·811
9	·000	·130	·174	·366	·596	·814
10	·007	·118	·177	·355	·588	·822
11	·003	·111	·185	·351	·585	·833
12	·003	·103	·188	·348	·585	·844
13	·003	·100	·203	·355	·588	·851
14	·003	·092	·214	·370	·603	·862
15	·000	·096	·222	·377	·618	·870
16	·000	·096	·229	·388	·633	·881
17	·014	·100	·233	·396	·640	·885
18	·029	·103	·233	·403	·651	·888
19	·037	·107	·233	·407	·659	·892
20	·048	·111	·237	·414	·670	·900
21	·059	·111	·237	·425	·677	·903
22	·066	·114	·237	·444	·688	·907
23	·074	·126	·240	·448	·696	·914
24	·085	·133	·244	·448	·700	·922
25	·092	·148	·248	·448	·707	·929
26	·103	·155	·251	·448	·711	·937
27	·103	·159	·255	·462	·718	·944
28	·096	·166	·262	·481	·729	·955
29	·088	—	·270	·503	·737	·962
30	·077	—	·277	·518	·748	·962
31	·066	—	·292	—	·762	—
Media	·040	·112	·215	·397	·643	·868

TABLE IV.—*continued.*

—	July.	August.	Sept.	October.	Nov.	Dec.
1	·962	1·000	·862	·666	·403	·229
2	·959	·992	·855	·662	·396	·233
3	·959	·988	·851	·651	·392	·229
4	·962	·985	·848	·648	·385	·222
5	·966	·981	·840	·640	·377	·218
6	·970	·981	·833	·629	·370	·207
7	·974	·981	·825	·622	·355	·192
8	·970	·981	·822	·614	·344	·188
9	·962	·977	·818	·607	·333	·185
10	·962	·974	·814	·600	·825	·181
11	·966	·970	·811	·588	·314	·174
12	·970	·966	·807	·574	·311	·166
13	·974	·962	·803	·555	·296	·151
14	·970	·962	·796	·540	·288	·155
15	·970	·959	·785	·529	·277	·166
16	·970	·959	·777	·522	·262	·177
17	·970	·955	·770	·514	·255	·170
18	·970	·944	·759	·507	·248	·162
19	·970	·940	·755	·503	·248	·148
20	·966	·937	·744	·503	·248	·129
21	·962	·929	·740	·496	·240	·107
22	·962	·922	·737	·485	·229	·088
23	·962	·918	·733	·474	·218	·070
24	·966	·918	·722	·459	·203	·055
25	·974	·914	·718	·444	·196	·037
26	·985	·903	·711	·440	·200	·033
27	·992	·896	·703	·433	·207	·037
28	1·000	·892	·696	·425	·222	·055
29	1·000	·885	·685	·418	·225	·066
30	1·000	·874	·677	·411	·225	·070
31	1·000	·870	—	·407	—	·077
Media	·972	·945	·776	·534	·286	·141

I should have added the thermometrical register of 1861-62, which was carefully kept, but at the eleventh hour I find I have left it at Mentone, from whence I cannot obtain it in time. Had it been given, however, it would only have corroborated that of the two preceding years.

A perusal of the above tables will show that they thoroughly explain and substantiate the details I have given respecting the climate and vegetation of Mentone. The first winter, 1859-60, the lowest night temperature was 35° on the 17th December. The thermometer never descended lower than 37° on any other occasion. In the second winter, 1860-61, the lowest point attained was 32° on two nights in December, the 22nd and 23rd. On no other night did the thermometer mark a lower temperature than 37° , as in the previous winter.

In both winters this fall in the temperature coincided with extreme and unusual cold in the north of Europe. In 1859 the frost was very severe and prolonged throughout the north at that time, and in 1860 the thermometer descended at the same epoch 40° below the freezing point in England. The cold was more severe than had been known for thirty years throughout Europe.

Indeed, I remarked at Mentone that exceptionally cold or stormy weather always coincided with intense

frosts or violent storms in the north and centre of Western Europe. We were clearly not out of the influence of extreme meteorological disturbances occurring in the western regions of Europe, although we felt them but faintly. At those times we had generally a north-westerly wind, the sun was totally obscured by clouds, the higher mountains became covered with snow down to the level of the olive-groves, and cold rain fell on shore. These were our worst days; but fortunately such weather, as stated, never lasted more than two or three days. When on these occasions we received newspapers and letters from home a few days later, we invariably heard of fearfully cold weather on land, and of storms at sea.

It will be perceived that although the night minimum seldom descended below 40° during December, January, February, and March, it also seldom ascended above 50° , and was generally between 40° and 50° . The day maximum in the shade varied from 50° to 58° , although occasionally below 50° . This latter temperature nearly always coincided with a low night temperature and an obscured sky, and nearly always with snow on the mountains and rain on the shore.

The above data may be depended upon; as they were taken from self-registering thermometers made by Negretti for scientific observation. It is the minimum and maximum temperature of any given region that

principally regulates vegetation, and also to a great extent climate; and I believe, consequently, that on such data only can we form an accurate idea of the real climate of any locality. If a thermometer is only fairly placed according to the rules adopted by scientific meteorologists and the instruments used are good, there can be no possible deception by adopting this mode of observation. Any other is liable to error, especially in sunny climates, unless extreme precaution be taken to eliminate all undue solar influences, reflected heat, exceptionally sheltered situations, &c. Many observations in health localities are made with a mental bias which invalidates them. Thus, had I made my observations at ten o'clock, A.M., seventy feet from the ground, and within the influence of reflected heat from the sun, I might have obtained a temperature of 60° all but throughout the winter.

Dr. Dalrymple, in his recent interesting work on the Climate of Egypt,* gives the minima and maxima for the month of January and February accurately observed in his Nile boat. The night minimum was a fraction lower than at Mentone during the month of January, 1860 (from latitude 27° 13' to 22° 10'). During the month of February the mean was 5° higher, as will be seen by the comparative Table No. II. (from latitude

* "Meteorological and Medical Observations on the Climate of Egypt." By D. Dalrymple, M.D. 1861.

25° 55' to 31° 46'), showing the more rapid advance of spring. The day maximum, on the contrary, was much higher during both months, being all but constantly between 70° and 80°, and sometimes above 80°. The mean of January was as high as 72°·8, that of February 75°·7. Such a range must be very trying, especially to chest eases—from 40° or 45° at night to 70°, 75° or 80° in the day. At Mentone the mean maximum of January in the same year was 52°·2, that of February only 50°·9, but in 1861 53°·8. Although the climate be dry at Mentone, whenever in the autumn or in the spring the thermometer is at or above 70°, most of the chest invalids feel oppressed, although less so than in England. They appeared to get on best with a dry, sunshiny, cool atmosphere, such as generally prevailed, with the thermometer at 56° in the shade north, and from 58° to 62° in the shade south.

Moreover, I should think that a low night temperature, which has clearly to be encountered on the Upper Nile as well as on the Mediterranean coast, is better met by a serious invalid in a comfortable, well-built house on land than in a boat on a river, even if that river be the Nile. Not to speak of the discomforts of the long journey, of the proverbial unhealthiness of Alexandria and Cairo, where stations have to be made, and of the actual fatigue of constant change and motion.

At Malaga and Madeira the day maximum is also higher than at Mentone, according to Dr. Edwin Lee,* Dr. Francis,† and Mr. White,‡ as seen in Table III. The night minimum of Malaga is not given by these authors. Mr. White says that at Madeira the lowest point attained by a self-registering thermometer in 1841 was, in January, 51° ; in February, 53° . The mean minimum was 55° for both months—much higher, as we have seen, than either the Nile or Mentone medium.

In Table III. I have given the comparative mean maximum heat of the Nile, Madeira, Malaga, and Mentone during January and February. I have also added M. de Brea's media for Mentone temperature for each month, founded on ten years' observations. These observations prove that the summer temperature at Mentone is moderated by the proximity of the sea, as well as the winter. The summer maximum in ten years was only 89° .

The Table No. IV. is taken from Drew's "Meteorology," and will be useful to invalids leaving England

* "Spain and its Climates, with a Special Account of Malaga." By Dr. Edwin Lee. pp. 64. 1855.

† "Change of Climate, with an Account of the most eligible Places of Residence for Invalids in Spain and Portugal." By Dr. D. S. T. Francis. 1853.

‡ "Madeira: its Climate and Scenery." By Messrs. White and Johnson. 1860.

and returning, as it shows the days of autumn and spring that correspond in temperature. The coldest day in the year is marked by $\cdot 000$, the warmest by $1\cdot 000$.

Thus, an invalid leaving England October 1st, will find that the mean temperature of that day is $^{\circ}666$. The corresponding day of spring is the 20th May—viz., $^{\circ}670$. One use of this table is the warning it gives against a too early return home, which all are anxious to reach after the winter's long absence.

THE JOURNEY TO MENTONE.

First, I would advise no invalid to endeavour to reach Mentone before the latter end of October. September and the early part of October are still warm, indeed often oppressively hot. Moreover, the probability is, that in October will occur the two or three weeks of continued rain which constitute the rainy season. The heat and moisture are not only unpleasant but unwholesome, and apt both to weaken the constitution and to give rise to liver and intestinal congestion and irritation, and to diarrhœa.

The month of September is generally fine, pleasant, and safe in England, even for confirmed invalids, if they take care to avoid the sometimes chilly evening and morning air. By the end of the first or second week in October, the equinoctial gales are over, and it

is time to depart, as the English climate sometimes rapidly deteriorates both at night and day; a cloudy sky and dense morning fogs may then become the rule.

The invalid should go down to Folkestone or Dover in the morning or afternoon and sleep there. The next morning, if the weather is tolerably fine, he can cross. If the sea is very rough, it is absolute folly so to do. The depth of the water in this part of the British Channel is not great, and the sea soon rises and soon falls. It may be rough in the morning and smooth at night, or *vice versâ*. Moreover, he is in good quarters, —the Lord Warden at Dover, and the Pavilion at Folkestone, being both very comfortable hotels.

The last ten days of September and the first week of October the sea, in the straits between Dover and Calais, is nearly always rough. Then often comes a lull, a period of calm. This I learnt many years ago. When actively engaged in London practice, I always took a holiday in September, and generally spent it on the Continent. Returning for the opening of the London medical session, on the 1st of October, I usually had frightful passages, until I remembered that I was crossing just at the middle of the autumnal equinox. I then remained a week longer abroad, and became as fortunate in the sea passage as I had previously been unfortunate.

If the passage is effected without much suffering and

early in the day, even an invalid may often continue the journey to Paris the same day. By express train, it takes about four hours. In Paris there are innumerable good hotels. The Louvre, the new Grand Hotel, the Bedford, may be mentioned.

If France has been reached early in October, it may be well to remain in the north for a week or ten days before proceeding south, to avoid heat and rain. Paris itself is a healthy autumnal residence if the weather is fine.

Fontainebleau, which is thirty miles south of Paris, on the railroad to Lyons, is better still. The town is small and clean, the hotels airy and comfortable, and the forest scenery around extensive and very beautiful. The "Chateau," also, is full of interesting historical recollections. Indeed, I do not know of a more healthy or more pleasing resting-place for an invalid, either on his way from the north to the south in autumn, or on his return from the south in spring. Fontainebleau has certainly, in both seasons, a fortnight's advantage over Middlesex or Surrey. The autumnal fine weather continues a fortnight longer, and the spring begins a fortnight sooner.

Towards the 15th or 20th of October, according to the season, the journey should be continued to Lyons. The morning express from Paris to Lyons, Marseilles, and Toulon leaves Paris at 11 A.M., Mon-

tereau, 11.5, for Fontainebleau at 12.40. It reaches Dijon at 5.32, and Lyons at 10.5 P.M. ; Marseilles, 6.36 A.M. ; Toulon, 9.10 the next morning.

If the journey to Dijon is felt to be sufficient, good accommodation can be obtained there for the night, but the hours for both express trains the next day are awkward. As half an hour is given for a very comfortable table-d'hôte dinner, most travellers prefer to go on and to sleep at Lyons, where there is a first-rate hotel, the Grand Hotel de Lyons.

The day express from Lyons to Marseilles, the night one from Paris, leaves at too early an hour in the morning for invalids—viz., 7.30. I therefore advise them to make that day in a great measure a day of rest ; not to get up until eight or nine, to breakfast quietly, and to take the 12.10 P.M. omnibus train to Valence, which is reached at 3.54. The inn at Valence (Hotel de la Poste) is second-rate, but still will do for a night.

Valence is a pleasing little place, with a tree-planted promenade, looking over the broad and rapid Rhone. In one of the streets is shown a very unpretending house in which Napoleon Bonaparte lived for above a year, when lieutenant in a regiment quartered in the town. I always go to see it. The idea is strange of the great emperor lounging about this little provincial town as lieutenant in a marching regiment. What were

his thoughts, his views of the future, the limits, then, of his ambition.

The Marseilles express starts from Valence in the morning at 9.54 A.M., a much better hour, and, refreshed by two good nights' sleep, the traveller is better prepared for another long journey.

This train, the night express from Paris, reaches Marseilles at 3.45 P.M.; Toulon at 6.10. At Toulon there is a new and comfortable hotel, situated near to the railway terminus, and just out of the town, the Hotel de l'Amirauté, which I can recommend. Several others are building in the same position. Toulon is a good point at which to remain a few days, either to recruit or to gain time. It is so far south, and so very sheltered, that at the end of October it is still summer. There are the dockyards and port to visit, and the convict establishment, a terribly interesting sight. Hyeres, also, is within a drive and worth seeing.

The railroad will soon be open to Nice. It now terminates a few miles beyond Vidauban. The traveller at present, therefore, will have to take the diligence or a private carriage from Vidauban to Nice—not more than twelve hours' travelling. If a carriage is taken, the agreement might be made to extend to Mentone, which is four hours only from Nice. Or the traveller may merely go on to Nice, remain there a day, or longer, and then take a carriage on to

Mentone. The journey from Vidauban may be divided by sleeping at Cannes. From Cannes, Mentone is easily reached in a day. The diligences from Nice to Genoa refuse to book passengers for so short a part of their journey.

There is a steamer twice a week, Wednesday and Saturday, from Marseilles to Nice, but I do not recommend it to those who fear the sea. Owing to the little depth of water in the port of Nice, the steamers are necessarily small. In fine weather they get on bravely, but in bad weather they roll fearfully, and are always very much beyond the usual time—twelve hours—so that the passengers suffer greatly. The Gulf of Lyons has a very bad reputation. It is proverbial for its heavy seas when there is wind. Admiral Smythe says that there is sometimes in this region of the Mediterranean a swell equivalent to that of the Atlantic, and that it is then quite as rough as in the celebrated Bay of Biscay. At all events, the barometer should be consulted. If it has been falling for twenty-four or forty-eight hours, it is better to remain on *terra firma*. Some invalids do not mind the sea, never being ill. In that case it will certainly be the easiest way of reaching Nice until the railroad is opened throughout.

I have cautioned invalids against going south too soon; I must now caution them against going too

late. The Estrelle mountains between Toulon and Cannes should be crossed in October—if possible by or before the 25th—otherwise there is a risk of cold. Although not very high or formidable if the weather has quite broken up, cold rain and wind may be encountered. I have known those who have delayed their journey until November or December suffer from this cause.

I am persuaded that for ordinary invalids, the quiet, cautious mode of travelling above sketched out is the best. If good nights are secured, and a quiet breakfast taken at the usual hour, travelling during the day is very easily borne, and the invalid arrives at the journey's end without feeling wearied. There is no lost ground caused by broken nights and extra fatigue to make up. There are, however, cases in which it may be desirable to travel more rapidly. With young children, who can lie down, and who sleep nearly as well in a train as in their beds, it is better to push on—to go direct from Paris to Toulon, for instance. Again, with invalids who feel every change from the train to an inn and back as a dreadful fatigue and trial, it may also be as well to pack them up comfortably in an invalid carriage, and to push on.

When the journey is interrupted, the plan is to leave the luggage at the station, *au dépôt*, merely taking a carpet-bag with necessaries. The French

railroad company will not allow passengers the convenience of through tickets, with power to stop on the way, for what motive I cannot imagine.

The fare from London to Paris, by Folkestone tidal steamer, is: first class, 2*l.* 14*s.*; second class, 2*s.* 8*s.* From Paris to Marseilles by express, first class only, 100 frs. (4*l.*); to Toulon, 106 frs. (4*l.* 5*s.*) The steamer from Marseilles to Nice is 32 frs. (1*l.* 6*s.*) The private carriages for travelling are let at about the rate of 60 frs. a day, driver included, for two horses, and 100 for four. They carry about three hundred-weight of luggage.

Mentone may be easily reached by Lyons, Chambery, Mont Cenis, Turin, Genoa, and the Riviera; but I do not recommend this route to invalids. In October the pass of Mont Cenis is too cold; in September Italy beyond the mountain is too warm. Nor can invalids choose this route on their return in May, as that is the month when the snow on the higher Swiss mountains usually melts, and when the passes are at their very worst.

Those, however, who are merely wintering in the south for pleasure, or who merely wish to recruit from overwork and overfatigue, may easily make a very enjoyable progress on their way to their winter quarters. They can start early in September, pass through Switzerland, and over the Alps by the pass the least

known to them, the Splugen, St. Gothard, the Simplon, or Mount Cenis ; and once out of the line of the railroads, take a *vetturino* carriage and make a very pleasant tour. For instance, from Milan to Bologna, from Bologna to Florence and Pisa, from Pisa along the eastern Riviera to Genoa, and along the western to Mentone.

This is a very delightful excursion, which I made in years gone by, and which I never think of without pleasure. The best plan is to engage a comfortable *vetturino* carriage, charioteered by some good-natured man, and drawn by three or four good strong horses. The carriage may be chartered for a given journey or for an indefinite period.

This style of travelling—*vetturino*—is very common in the south of Europe, and is certainly the most comfortable, pleasant, and hygienic of any for tourists not particularly pressed for time. Once the traveller has secured a roomy and easy carriage, with an intelligent, civil driver, both of which are to be had if sought for,—and once the agreement fixing the payment at so much the distance or so much a day has been duly signed and delivered, he may bid adieu to care. He becomes master of his movements ; he can both eat when he likes and walk when he likes, and thus two of the greatest drawbacks to continued travelling are removed from his path.

In *vetturino* travelling, the driver and his equipage, for the time being, are your servants, and must do your bidding, so that your movements may be made consistent with previous habits and the laws of hygiene. Thus the journey becomes not only a pleasure, but also a source of health, instead of a trial of strength, as is often the case.

The plan which I generally adopted was, to rise at six or seven, and to start at seven or eight, the carriage being closed at the top as a protection against the sun, open at the sides, and prepared for the day's campaign by a comfortable arrangement of umbrellas, books, maps, and provisions; the latter usually consisted of a basket of bread, biscuits, and fruit, provided before starting as a resource in case of difficulty. At nine or ten we stopped for breakfast, which can be obtained anywhere, if the traveller is contented with coffee, tea, chocolate, bread, butter, eggs, and honey. At ten the journey is resumed, and at twelve or thereabouts the principal stoppage of the day takes place for the dinner of the driver and of his horses.

If the traveller wishes to make a solid lunch, he can do so; if he is satisfied with his own more frugal supplies, the midday rest is a period of liberty, during which he can survey all around; analyse the habits and customs of the peasantry, study the architecture of their houses, farms, out-buildings, their agricultural

operations, and the local botany ; and finally, if agreeable, and weather permits, take a good hygienic walk in advance of three or four or more miles. When tired, he has only to sit down by the roadside in some picturesque nook until his carriage overtakes him. If the driver, as is usually the case, does not start until two, and four or five miles have been got over, it is nearly three before the carriage is again resumed. To me these midday strolls in advance were the pleasantest part of the day's journey. After that, progress is steadily made until six, when the final stoppage takes place. Then comes dinner, a walk, or a chat with your companions or some new acquaintance, a cup of tea, and an early retirement for the night.

This day's programme can be varied according to the wishes of the traveller, to health requirements, and time. For instance, the first start may only be made after an early breakfast, and the final stoppage may be made earlier. It is important for the traveller ever to remember that he is not the driver's servant, but the driver his, bound to accept and submit to any reasonable demand.

When the south of Europe is reached in the autumn, two great plagues have to be encountered—fleas and mosquitoes. For the former there is an admirable remedy in France with which I should advise all travellers to provide themselves from a chemist—viz.,

“*La Poudre Insecticide.*” A teaspoonful, more or less, according to the number of one’s foes, sprinkled over the sheets, has an admirable effect. In the morning they are found lying on their backs, either dead or faintly struggling, and utterly powerless; a very pleasing sight.

Mosquitoes are more difficult to deal with, and much more venomous antagonists. The higher we are the less numerous we find them; so we are recompensed, in one sense, for climbing up to a third or fourth storey. It is well to remember, also, that light attracts them, and not to open the window at dark whilst there is a light in the room.

Where there are net or tulle mosquito-curtains, it is easy to keep them at bay; but these are seldom met with. The curtains are mostly open, and so heavy, that if closed the inmate is soon half-suffocated. Although mosquitoes are numerous both at Nice and Mentone, the bed-curtains are as defective as elsewhere. It is therefore quite worth while for those who suffer from these insects, and especially for invalids, to have at once on arriving bed-curtains made of net, closed all round. They admit of the free passage of air, and as they are lifted up bodily at the side, they can be thoroughly closed again, and these vile pests can be kept at bay. Then their war-song on the outside is heard with pleasure instead of pain. When he lies

defenceless in the dark, alarmed by their remorseless dance around his face, and by their ferocious trumpeting, the intended victim is apt to become perfectly wild.

Mosquitoes continue venomous in the south as long as the nights are warm. The advent of cold nights in November seems at once to take away their power of inflicting injury. I have observed the same thing in England. Insects exactly like the southern mosquitoes abound in wooded districts in the south of England. In cool summers, however numerous, they seldom or never sting; but in hot summers their venom is elaborated, and they become nearly as formidable as those of the Mediterranean shores.

For further travelling details I must refer my readers to "Bradshaw's Continental Guide."

THE END.



